

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF MISSOURI  
SOUTHEASTERN DIVISION

IN RE: DICAMBA HERBICIDES ) MDL No. 2820  
LITIGATION )  
 ) JURY TRIAL DEMANDED  
 )

**CROP DAMAGE CLASS ACTION MASTER COMPLAINT**

Plaintiffs individually and on behalf of all others similarly situated, bring these claims against defendants Monsanto Company, BASF SE, and BASF Corporation, and state as follows:

**NATURE OF THE ACTION**

This action is brought by farmers who have suffered damage as a result of the design, development, promotion, and sale of a genetically engineered trait conferring resistance to dicamba expressly for the purpose of spraying dicamba herbicide over the top of growing plants as part of a dicamba-based crop system. Defendants knew that dicamba, highly volatile and prone to drift, is ruinous to susceptible non-dicamba resistant plants and crops. Not only did Defendants release their dangerous system onto the market, creating high risk of harm, but everything they did and failed to do increased that risk, all but ensuring damage to non-dicamba resistant plants and crops. That damage in fact served Defendants' purpose of pressuring farmers to purchase dicamba-resistant seed out of self-protection. Defendants created and carried out a scheme of ecological disaster for their financial gain and to the detriment of the very persons they knew would be harmed.

## **PARTIES**

### ***Plaintiffs***

#### ***Arkansas***

1. Earl H. Wildy, Inc. is an Arkansas corporation that farms in Mississippi County, Arkansas. Earl H. Wildy, Inc. in 2017 grew non-dicamba resistant soybeans in Arkansas damaged by dicamba. It did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.
2. Wildy Farms North, Inc. is an Arkansas corporation that farms in Mississippi County, Arkansas. Wildy Farms North, Inc. in 2017 grew non-dicamba resistant soybeans in Arkansas damaged by dicamba. It did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.
3. Wildy Farms South, Inc. is an Arkansas corporation that farms in Mississippi County, Arkansas. Wildy Farms South, Inc. in 2017 grew non-dicamba resistant soybeans in Arkansas damaged by dicamba. It did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.
4. Justin Wildy and Kristi Wildy are citizens of Arkansas and the partners of Justin Wildy Farms Partnership, farming in Mississippi County, Arkansas. Justin Wildy Farms Partnership and its partners in 2017 grew non-dicamba resistant soybeans in Arkansas damaged by dicamba. They did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.
5. Wildy Farms East, LLC is an Arkansas limited liability company, whose members are citizens of Arkansas, that farms in Mississippi County, Arkansas. Wildy Farms East, LLC in

2017 grew non-dicamba resistant soybeans in Arkansas damaged by dicamba. It did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

6. Chris Oakes is a citizen of Arkansas who farms in Poinsett and Cross Counties, Arkansas. Mr. Oakes in 2017 grew non-dicamba resistant soybeans in Arkansas damaged by dicamba. He did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

*Illinois*

7. Bumper Crop Farms, LLC is an Illinois limited liability company, whose sole member is a citizen of Indiana, that farms in White and Hamilton Counties, Illinois. Bumper Crop Farms, LLC in 2017 grew non-dicamba resistant soybeans in Illinois damaged by dicamba. It did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

*Kansas*

8. 4-R Farms, Inc. is a Kansas corporation that farms in Nemaha and Pottawatomie Counties, Kansas. 4-R Farms, Inc. in 2017 grew non-dicamba resistant soybeans in Kansas damaged by dicamba. It did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

9. Jed Claassen is a citizen of Kansas who farms in Harvey and Sedwick Counties, Kansas. Mr. Claassen in 2017 grew non-dicamba resistant soybeans in Kansas damaged by dicamba. He did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

*Mississippi*

10. Marshall W. Scallion and Brooke W. Scallion are citizens of Mississippi and partners of Scallion Farms Partnership, farming in Sunflower and Coahoma Counties, Mississippi. Scallion Farms Partnership and its partners in 2017 grew non-dicamba resistant soybeans in Mississippi damaged by dicamba. They did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

*Missouri*

11. Steve Johnson and Lisa Marie Johnson are citizens of Missouri and do business as Steve Johnson Farm, farming in Scott and Stoddard Counties, Missouri. They in 2017 grew non-dicamba resistant soybeans in Missouri damaged by dicamba. They did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

12. Muskrat Flats, LLC is a Missouri limited liability company, whose members are citizens of Missouri, that farms in Stoddard County, Missouri. Muskrat Flats, LLC in 2017 grew non-dicamba resistant soybeans in Missouri damaged by dicamba. It did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

13. Rus Lanpher is a citizen of Missouri who farms in Cape Girardeau and Bollinger Counties, Missouri. Mr. Lanpher in 2017 grew non-dicamba resistant soybeans in Missouri damaged by dicamba. He did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

14. Jerry Franks is a citizen of Missouri who farms in Dunklin County, Missouri. Mr. Franks in 2016 grew non-resistant soybeans in Missouri damaged by dicamba. He did not in 2016 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

***Nebraska***

15. Shane Greckel is a citizen of Nebraska who farms in Knox County, Nebraska. Mr. Greckel in 2017 grew non-dicamba resistant soybeans in Nebraska damaged by dicamba. He did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

***South Dakota***

16. Kay Don Jons is a citizen of South Dakota who farms in Gregory County, South Dakota. Mr. Jons in 2017 grew non-dicamba resistant soybeans in South Dakota damaged by dicamba. He did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

***Tennessee***

17. Charles Tipton and John Tipton are residents of Tennessee and Arkansas, respectively, and are the partners of Tipton Brothers Partnership, farming in Tipton County, Tennessee. Tipton Brothers Partnership and its partners in 2017 grew non-dicamba resistant soybeans in Tennessee damaged by dicamba. They did not in 2017 spray dicamba over the top of any crops grown with seed containing the dicamba-resistant trait.

***Defendants***

18. Monsanto Company (“Monsanto”) is a corporation organized and existing under the laws of the State of Delaware with its corporate headquarters and principal place of business in St. Louis County, Missouri.

19. Monsanto designs, develops, manufactures, licenses, and sells biotechnology, chemicals, and other agricultural products, including herbicides and seed genetically modified to produce crops resistant thereto. These include Roundup Ready 2 Xtend Soybean (“Xtend

soybeans”), Bollgard II XtendFlex Cotton (“Xtend cotton”) and a herbicide known as XtendiMax with VaporGrip Technology® (“XtendiMax”).

20. Along with BASF SE and BASF Corporation, Monsanto developed, and also licenses and sells a genetically engineered trait in soybean and cotton seed, and seed containing that trait, for intended use with dicamba herbicide, marketed and sold in states including those alleged in this action.

21. BASF SE is a corporation organized and existing under the laws of Germany with its overall headquarters in Ludwigshafen, Germany. BASF SE describes itself as the largest chemical company in the world. In materials describing the company, BASF SE lists one of its “Country Headquarters” as BASF Corporation, 100 Park Avenue, Florham Park, NJ.

22. BASF Corporation is a company organized and existing under the laws of the State of Delaware, with corporate headquarters at 100 Park Avenue, Florham Park, New Jersey and/or research headquarters at 26 Davis Drive, Research Triangle Park, NC. BASF Corporation is the largest affiliate of BASF SE and the second largest producer and marketer of chemicals and related products in North America. It is a subsidiary and North American agent for BASF SE.

23. BASF Corporation is the entity whose name and address appears on labels of the the dicamba herbicide known as Engenia. Dr. Jeffrey Birk (BASF, 26 Davis Drive Research Triangle Park, NC), is listed as “registrant” on the EPA Notice of Pesticide Registration for Engenia (EPA Reg. No. 7969-345) dated December 20, 2016. On information and belief, Dr. Jeffrey Birk is a Regulatory Manager at BASF Corporation.

24. Chemical manufacturers and importers are required to develop a Safety Data Sheet for each hazardous chemical they produce. *See* 29 CFR 1910.1200(g). A Safety Data Sheet for Engenia dated January 16, 2017 identifies BASF SE (67056 Ludwigshafen, Germany), as the

supplier of the safety data, with a “Contact address” of BASF Corporation, 100 Park Avenue, Florham Park, NJ 07932.

25. BASF SE is a global company that extensively integrates operational, managerial, and financial resources across entity lines. BASF SE and its group of entities operate by business segments or “divisions.” Employees have reporting relationships and carry on activities defined not by corporate relationships but by such business or operational segments. “Agricultural Solutions” and/or “Crop Protection” is a business segment within and supported by this integrated organization. For example, entities within the BASF organization share operational systems and services including finance, legal, taxes, intellectual property, investor relations, communications and government relations, human resources, engineering and site management, environmental protection, and health and safety. BASF Website, “Organization of the BASF Group,” <https://www.bASF.com/en/company/about-us/strategy-and-organization/structure.html>.

26. “Within BASF Group, BASF SE takes a central position: Directly or indirectly, it holds the shares in the companies belonging to the BASF Group, and is also the largest operating company.” BASF SE Webpage, “About Us,” <https://www.bASF.com/de/en/company/about-us/strategy-and-organization.html>. The BASF SE Board of Executive Directors is responsible for overall management of the company, and BASF SE exercises authority and control over BASF Corporation and its operations. BASF SE and BASF Corporation share one or more officers and/or directors. On information and belief, at least two of the three current BASF Corporation directors are current or former director of BASF SE. BASF Corporation does not function independently but under the BASF umbrella where the BASF group operates a unitary business.

27. BASF SE coordinates crop protection activities from the BASF Agricultural Center in Limburgerhof, Germany. *See* BASF Brochure (BASF SE/Global Communications Crop

Protection, 2016), <https://industries.bASF.com/assets/global/corp/en/Agriculture/Crop%20Protection/Brochure%20Crop%20Protection%20Englisch.pdf>.

28. BASF Corporation is an agent through which business in North America is conducted. Jurisdictional contacts of BASF Corporation are attributable to BASF SE.

29. In addition, and on information and belief, BASF SE and BASF Corporation each has participated directly in the events alleged herein pertaining to the design, development, release, promotion, marketing, and sale of the dicamba-based crop system.

30. BASF SE and BASF Corporation regularly refer to themselves as “BASF” with no further description, and unless otherwise indicated, are herein referred to collectively as “BASF”.

31. As more fully described herein, Monsanto and BASF have since at least 2007 entered into one or more agreements in order to, and did, engage in a partnership, joint venture, joint enterprise, or similar relationship to develop technologies for a dicamba-based crop system, respecting which they jointly fund projects and share risks and profits. They jointly developed the dicamba-resistant trait, as well as dicamba formulations for application over the top of crops grown from that trait, entered into reciprocal licensing arrangements, engaged in joint field testing, jointly developed stewardship guidelines, and otherwise acted at all relevant times together in designing, developing, marketing, manufacturing, licensing and sale of the dicamba-based crop system. On information and belief, a substantial portion of these activities occurred in this district.

32. Among other things, BASF provided Monsanto with the dicamba formulation that became XtendiMax. BASF markets and sells its own dicamba herbicide Engenia specifically for use with seed containing the dicamba-resistant trait.

33. At all relevant times, Monsanto and BASF acted together and in concert as joint-venturers, joint enterprises, partners and co-conspirators who shared financial risks and benefits,

proprietary dicamba formulations and bioengineered crop traits, collaborated in and jointly conducted field testing, marketing, promotion, training, and other shared activities all with the common interest and purpose of creating ever more demand for seed with the dicamba-resistant trait and further use of dicamba, each acting in its own right and as agent for the other.

**JURISDICTION AND VENUE**

34. This Court has subject matter jurisdiction over this case under 28 U.S.C. § 1331 in that claims are asserted under the Lanham Act, 15 U.S.C. § 1125(a), and the Court has supplemental jurisdiction over state claims pursuant to 28 U.S.C. § 1337(a).

35. Additionally, this Court has jurisdiction under 28 U.S.C. §1332(d)(2)(A) and (C). This case is a class action, as defined by 28 U.S.C. § 1332(d)(1)(B), and the amount in controversy exceeds \$5,000,000, exclusive of interest and costs. Plaintiffs, individually and those similarly situated, include citizens of states other than Delaware and defendants are citizens of Delaware and of a foreign state, Germany.

36. In the further alternative, this Court has supplemental jurisdiction over this case under 28 U.S.C. § 1337(a).

37. This Court has general personal jurisdiction over Monsanto as to all plaintiffs who filed their cases originally in Missouri. Monsanto is registered to conduct business in Missouri, maintains its principal place of business and headquarters in Missouri at 800 N. Lindbergh Blvd., St. Louis, Missouri, is present and transacts substantial business in Missouri, has a registered agent in Missouri, consistently and purposefully avails itself of the privileges of conducting business in Missouri and can fairly be regarded as at home in Missouri.

38. BASF and Monsanto at all relevant times acted together and in concert, as agents, joint-venturers, joint enterprises, partners and co-conspirators with common intent and purpose

and in single enterprise to develop, promote, market and sell the dicamba-based crop system at issue. Jurisdictional contacts of Monsanto are attributable to BASF.

39. The originating courts and this Court also have specific personal jurisdiction over all Defendants, each of whom itself or through an agent purposefully directed activities at residents, entered into contracts, transacted business, and/or committed tortious acts, in each state in which plaintiffs and class members reside including but not limited to development, advertising, distributing, and selling the dicamba-resistant trait and seed containing it, as well as dicamba herbicides and the dicamba-based crop system, as well as inadequate training, from which the injuries suffered by plaintiffs and class members in those states, and claims herein arise and/or to which they relate.

40. Venue in this and each district in which Plaintiffs originally filed an action is proper pursuant to 28 U.S.C. § 1391. All Defendants are residents of each such district under 28 U.S.C. § 1391(c)(2) in that they are entities subject to the court's personal jurisdiction. Additionally, BASF SE may be sued in any such district under 28 U.S.C. § 1391(c)(3). In addition, a substantial part of the events or omissions giving rise to the claims occurred in each such district and property harmed is situated therein.

41. Defendants have and continue, at minimum, to advertise, market, sell, or otherwise disseminate, the dicamba-resistant trait and seed containing it, dicamba herbicides, and the dicamba-based crop system in each of these districts.

42. Without waiving their rights to request that their claims be transferred back to the court in which they originally filed pursuant to 28 U.S.C. § 1407 for trial, Plaintiffs who originally filed in another district assert that venue is proper in this District for pretrial multidistrict litigation proceedings under 28 U.S.C. §§ 1391 and 1407 as their actions were transferred to this District as

part of coordinated pretrial multidistrict litigation proceedings. All Plaintiffs reserve their right to determine the appropriate venue for trial.

**FACTUAL BACKGROUND AND GENERAL ALLEGATIONS**

**A. Monsanto, Glyphosate, and Super Weeds**

43. Monsanto was one of the first companies to utilize biotechnology in the field of agriculture and has become a leading producer of genetically modified seed and agro-chemicals.

44. Biotechnology has made possible the introduction of genetic characteristics, or traits, into plant seeds.

45. In the 1970s, Monsanto patented the glyphosate molecule, which became the active ingredient in Roundup herbicide.

46. Glyphosate is a non-selective herbicide that causes severe injury or destruction to plants, including soybean and cotton, that have not been genetically modified to tolerate it.

47. Introduced in 1974, Roundup became one of the world's most widely used herbicides.

48. Monsanto also genetically engineered seed to withstand its glyphosate herbicide, sold under the brand name Roundup Ready ("RR").

49. Monsanto's development and sale of the glyphosate-tolerant trait changed how farmers could apply glyphosate herbicide. Rather than being applied before the crop is planted (in "burndown" stage), Roundup can be sprayed over the top of growing crops genetically modified to withstand it. As a result, farmers planting glyphosate-tolerant crops can apply it over an entire field after the crop has emerged without damage to the crop itself. Over-the-top application of glyphosate is now commonplace.

50. Monsanto began selling RR soybean seed in 1996 and RR corn seed in 1998. Other crops genetically altered to withstand Roundup herbicide include canola, cotton, alfalfa, and sugar beets.

51. The Roundup Ready crop system became Monsanto's flagship. Monsanto's Roundup herbicide and RR seed each supported the other, becoming a blockbuster combination.

52. The glyphosate-resistant trait is a technology that Monsanto patented, owns and licenses. A farmer cannot obtain that technology without buying the seed into which it has been inserted.

53. Until 2015, Monsanto held the patent on its "first generation" Roundup Ready ("RR1") trait.

54. Well before Monsanto's patent on its original RR technology expired in 2015, Monsanto patented a "second generation" Roundup Ready ("RR2") trait, which expresses the same enzyme that confers glyphosate resistance as before.

55. Monsanto charges more for its RR2Yield soybean seed than its original RR1 soybean seed, marketing it as having better yield, which it does not as compared to RR1 and/or other varieties.

56. More than 90% of soybeans and approximately 80% of corn and cotton are grown from seed containing Monsanto's RR trait.

57. As of 2016, glyphosate had become the most-used agricultural chemical ever.

58. Weeds, however, have evolved to become naturally resistant to glyphosate. These are known as "super weeds."

59. Monsanto's sale and distribution of the RR trait and Roundup herbicide set in motion a dangerous cycle whereby weeds evolve to resist the chemicals designed to destroy them, forcing farmers to apply higher doses or use different herbicides.

60. Monsanto's RR trait and Roundup herbicide directly contributed to this problem. All the while, Monsanto made massive profits.

#### **B. Development of the Dicamba-based Crop System**

61. Recognizing the opportunity to protect and enhance its dominance with RR, and to capitalize on and dominate the market with a new trait to address the weed problem Monsanto's own Roundup products produced, Monsanto, along with BASF, set out to develop a crop system featuring dicamba, an exceptionally volatile and damaging herbicide.

62. According to Monsanto President, Brett Begemann, this new crop system provides Monsanto "a source of growth longer term." Carey Gillam, *Monsanto to invest more than \$1 bln in dicamba herbicide production* (June 24, 2015), <https://www.reuters.com/article/monsantodicamba/monsanto-to-invest-more-than-1-bln-in-dicamba-herbicide-production-idUSL1N0ZA1XN20150624>.

63. Originally invented by BASF, dicamba is a broad-spectrum systemic herbicide that destroys broadleaf weeds and plants.

64. Dicamba mimics the plant hormone auxin, causing uncontrolled cell division and growth, causing the plant to grow so fast that it cannot retain the nutrients it requires, which kills the plant.

65. Certain plants are extremely sensitive to dicamba even in trace amounts, especially soybeans.

66. Other plants including fruit trees, ornamental trees, and vegetable crops also are sensitive to dicamba and damaged by exposure to it.

67. It is well known to agro-chemical companies like Monsanto and BASF that dicamba has extreme negative effects on desirable broad-leaf plants, including trees, fruits, vegetables, and various crops, especially soybeans.

68. A healthy soybean plant will produce fully-developed pods and leaves throughout the stem of the plant.

69. Dicamba exposure to susceptible plants and crops, including soybeans, results in unique and distinctive physical symptoms including leaf cupping, alone or together with other symptoms such as curling, strapping, discoloration, leaf elongation, wrinkling, stunting, and twisting. A soybean plant damaged by dicamba will lose pods throughout the stem as well as number of beans per pod.

70. It also is well known to companies like Monsanto and BASF that dicamba is extremely volatile, meaning that it has a high propensity to evaporate, or vaporize, from soil and/or plant surfaces and move as small particles through the air to deposit onto non-target plants and crops. Vaporized dicamba can travel great distances before falling onto and damaging susceptible off-target plants and crops not resistant to dicamba.

71. In addition, dicamba's volatility is long-lived, meaning longer exposure for non-tolerant plants and increased risk of movement.

72. Dicamba not only is very volatile but very prone to spray drift.

73. Such drift, as opposed to volatilization, is movement of spray droplets to non-target areas. Such drift can be influenced by weather, wind speed and direction, droplet size and ground speed or spray pressure.

74. Temperature inversions increase the likelihood of movement by drift as well as volatilization. A temperature inversion occurs where the air above the ground is warmer than the ground itself. An inversion layer forms where the warmer air is present, blocking atmospheric flow. This causes the air over the inversion layer to become stable, trapping everything inside of the layer and allowing it to move long distances.

75. Dicamba (first sold by BASF under the brand name Banvel) has been on the market in various forms since the 1960s, but for all these reasons, historically has been used in pre-planting or post-harvest burndown. Because this application occurs in cooler parts of the year and typically, there are no neighboring, growing crops to damage during burndown, there is less risk in applying dicamba during this stage.

76. In order to apply dicamba over the top of growing plants so as to kill unwanted weeds but not the crop, a genetic modification for tolerance to dicamba would need to be developed.

77. Monsanto entered into agreements with BASF to create, accelerate, promote, and commercialize a dicamba-based crop system.

78. A genetically engineered trait for soybean and cotton seed to withstand dicamba was developed by Monsanto and BASF, marketed and sold expressly for in-crop use of dicamba herbicide. There is no reason for, or value in, genetic modification to tolerate dicamba herbicide except for in-crop use of such herbicide.

79. At all relevant times, Monsanto and BASF acted together in the design, development, promotion, marketing and sale of such a system, consisting of the dicamba-resistant trait, seed containing that trait, and dicamba herbicide.

80. Monsanto and BASF entered into one or more agreements to combine their property, money, efforts, skill and knowledge in partnership, joint venture or joint enterprise for their mutual benefit and profit, with common purpose and community of interest in that purpose, equal right to voice and control, and the sharing of profits and losses.

81. These companies' history with dicamba-resistant technology traces back to 1993 when Sandoz Agro, Inc. ("Sandoz") contracted with the University of Nebraska to fund research being done by University researchers including Donald Weeks relating to dicamba resistance. BASF purchased Sandoz assets, including rights in know-how for dicamba-based products. In 2005, the University entered into another contract with Monsanto, which Monsanto claimed granted it exclusive world-wide rights in dicamba-resistant technology. Both companies claimed entitlement to rights in a lawsuit in which Monsanto intervened in 2006.

82. Ultimately, Monsanto obtained a number of patents covering genetic modification for resistance to dicamba.

83. In 2007, Monsanto and BASF entered into one or more agreements to design, develop, and accelerate biotechnology traits and products, sharing proprietary information and a joint budget of some \$1.5 billion. Biotechnology traits would be commercialized by Monsanto, with profits split 60% to Monsanto and 40% to BASF. Joint News Release (BASF from Limburgerhof, Germany and Monsanto from St. Louis, Missouri), *BASF Plant Science and Monsanto to Expand Their Collaboration in Maximizing Crop Yield* (July 7, 2010), <https://monsanto.com/news-releases/bASF-plant-science-and-monsanto-to-expand-their-collaboration-in-maximizing-crop-yield/>.

84. In a joint press release issued by BASF (from Germany) and Monsanto (from St. Louis), Robb Fraley, Monsanto's Chief Technology Officer and Executive Vice President, stated:

“By broadening the pipeline of potential traits, exchanging technology and sharing risk, this collaboration can accelerate the discovery of next-generation technologies for the farm and effectively double the risk-adjusted net present value of Monsanto’s yield and stress trait technology pipeline.” News Release, *BASF and Monsanto Announce R&D and Commercialization Collaboration Agreement in Plant Biotechnology* (March 21, 2007), <https://monsanto.com/news-releases/bASF-and-monsanto-announce-r&D-and-commercialization-collaboration-agreement-in-plant-biotechnology/>.

85. Monsanto and BASF aggressively advertised and touted what became the Roundup Ready Xtend Crop System (“Xtend Crop System”), designed as and consisting of seed containing the dicamba-resistant trait and dicamba herbicide.

86. Monsanto and BASF consider – and have always described and marketed – seed containing the dicamba-resistant trait and dicamba herbicide as an integrated weed control system.

87. In January 2009, Monsanto (from St. Louis) and BASF (from Germany) announced a joint licensing agreement to accelerate use of dicamba-based weed control chemistry products, stating that Monsanto and BASF both “will participate in the development of innovative formulations for dicamba for use with herbicide-resistant cropping systems.” News Release, *BASF and Monsanto Formalize Agreement to Develop Dicamba-Based Formulation Technologies* (Jan. 20, 2009), <https://monsanto.com/news-releases/bASF-and-monsanto-formalize-agreement-to-develop-dicamba-based-formulation-technologies/>.

88. Monsanto and BASF explained: “Crops that are resistant to both Roundup® agricultural herbicides and dicamba” would represent the next generation of herbicide-resistant crops and that “[i]mproved formulations of dicamba are being developed to complement this new combination of herbicide-resistant crops.” *Id.*

89. Emmanuel Butstraen, Group Vice President, Global Strategic Marketing, Herbicides, for BASF stated: “We are very excited to actively participate in developing innovative solutions for this next-generation cropping system for growers.” *Id.*

90. By 2010, Monsanto and BASF added a joint investment of more than \$1 billion to their collaboration.

91. In a joint press release on July 10, 2010, Monsanto (from St. Louis) and BASF (from Germany), Peter Eckes, President of BASF Plant Science (a subsidiary, “division,” and agent of BASF SE), stated: “The collaboration with Monsanto was not only the first agreement that we entered, it also represents our most significant partnership, covering several large row crops . . . The expansion of our partnership reflects the fit between the two companies.” News Release, *BASF Plant Science and Monsanto to Expand Their Collaboration in Maximizing Crop Yield* (July 7, 2010), <https://monsanto.com/news-releases/bASF-plant-science-and-monsanto-to-expand-their-collaboration-in-maximizing-crop-yield/>.

92. In a joint press release on November 2, 2010, Monsanto (from St. Louis) and BASF (from Germany) announced “significant progress toward launching next-generation dicamba-based weed control systems for soybeans and cotton.” Joint Press Release, *BASF and Monsanto Announce Progress in Dicamba Formulations* (Nov. 2, 2010), <https://monsanto.com/news-releases/bASF-and-monsanto-announce-progress-in-dicamba-formulations/>.

93. Kerry Preete, Monsanto Vice President of Crop Protection, stated: “Together the strength of the formulation expertise BASF has with dicamba and our team’s biotech focus seeks to deliver another breakthrough product in weed control.” *Id.*

94. BASF made the decision early on that Engenia was being developed specifically for use in the dicamba-tolerant cropping system. *See* Ag Professional (April 30, 2014), <https://www.agprofessional.com/article/engenia-specific-dicamba-resistant-crops>.

95. Markus Heldt, president of BASF's Crop Protection division, stated: "The dicamba tolerant system is designed [to] give growers pre- and post-emergence application flexibility, allowing them to better manage their resources and thus improving productivity." Joint Press Release (Monsanto from St. Louis and BASF from Germany), *BASF and Monsanto Announce Progress in Dicamba Formulations* (Nov. 2, 2010), <https://monsanto.com/news-releases/bASF-and-monsanto-announce-progress-in-dicamba-formulations/>.

96. In 2010, BASF SE told shareholders that it continuously invests in "pipeline" products, including "HT [Herbicide Tolerant] Project Dicamba." BASF SE 2010 Annual Report (Management Analysis) at 70 ([https://www.bASF.com/documents/corp/en/aboutus/publications/reports/2011/BASF\\_Report\\_2010.pdf](https://www.bASF.com/documents/corp/en/aboutus/publications/reports/2011/BASF_Report_2010.pdf)).

97. In a January 6, 2011 Press Release, Monsanto described collaborative "Agronomic Traits Projects," which included dicamba-tolerant soybeans. Peter Eckes from BASF stated: "The advances in development show that we chose the right path in our partnership with Monsanto . . . BASF is confident that our genes will result in crops that produce significantly higher yields and that we will be able to make these available to farmers in the future." Press Release, *Monsanto Announces Nine Project Advancements in Annual Research and Development Pipeline* (Jan. 6, 2011), <https://monsanto.com/news-releases/monsanto-announces-nine-project-advancements-in-annual-research-and-development-pipeline-update/> (emphasis added).

98. In a March 14, 2011 joint press release, Monsanto (from St. Louis) and BASF (from Germany) described agreement to "collaborate on the advancement of dicamba tolerant cropping

systems. The companies have granted reciprocal licenses and BASF has agreed to supply formulated dicamba herbicide products to Monsanto.” Joint Press Release, *BASF and Monsanto Take Dicamba Tolerant Cropping System Collaboration to the Next Level* (March 14, 2011), <https://monsanto.com/news-releases/bASF-and-monsanto-take-dicamba-tolerant-cropping-system-collaboration-to-the-next-level/>.

99. Robb Fraley, Monsanto’s Chief Technology Officer, stated: “Our work with BASF brings us one step closer to bringing more improved weed control offerings to farmers. We expect the formulations to be an excellent complement to Monsanto’s dicamba tolerant seed technologies when they are brought to market.” *Id.*

100. In 2016, Monsanto described the Xtend Crop System as consisting of dicamba-resistant seed and generically, “Xtend herbicide,” then “pending regulatory approvals” and said the system was “pending regulatory approvals for its component products.” Monsanto Website, *Roundup Ready 2 Xtend Soybeans Currently in Phase IV of Monsanto’s R&D Pipeline*, <http://web.archive.org/web/20160124141008/http://www.monsanto.com/products/pages/roundup-ready-2-xtend-soybeans.aspx>.

101. Monsanto also has described XtendiMax as “[a]n integral component of the Roundup Ready® Xtend Crop System.” Monsanto Website, *Roundup Ready Xtend Crop System Chemistry*, <http://www.roundupreadyxtend.com/About/Chemistry/Pages/default.aspx> (last visited Dec. 19, 2017).

102. According to Monsanto, the “Xtend Crop System” is “comprised of both seed and herbicide solutions.” *The Next Step in Weed Management*, [https://www.roundupreadyplus.com/Content/assets/docs/forum/NeedToKnow\\_RoundupReadyXtendCropSystem.pdf](https://www.roundupreadyplus.com/Content/assets/docs/forum/NeedToKnow_RoundupReadyXtendCropSystem.pdf) (last visited Dec. 19, 2017).

103. Dan Westberg, regional tech service representative for BASF, said that “Engenia is that step change improvement that we’ve developed specifically for the dicamba-tolerant crops – cotton in 2015 and soybeans, hopefully, in 2016.” Forrest Laws, *Engenia to offer ‘most advanced’ formulation of dicamba available* (Aug. 25, 2014), <http://www.deltafarmpress.com/cotton/engenia-offer-most-advanced-formulation-dicamba-available>.

104. Monsanto and BASF conducted joint field testing of dicamba-based formulations applied over the top of dicamba-tolerant soybeans in development. Their collaboration also includes joint development of stewardship, education programs, and best practices to “support long term sustainability” of a dicamba-tolerant system. *Monsanto and BASF Yield-and-Stress Collaboration Field Tour Monmouth Research Facility* (Aug. 8, 2011), [https://www.bASF.com/documents/corp/en/investor-relations/calendar-andpublications/calendar/2011/roundtable\\_agricultural/110808\\_Agro\\_Roundtable\\_2011\\_Tour.pdf](https://www.bASF.com/documents/corp/en/investor-relations/calendar-andpublications/calendar/2011/roundtable_agricultural/110808_Agro_Roundtable_2011_Tour.pdf); *see also* Joint Press Release, *BASF and Monsanto Take Dicamba Tolerant Cropping System Collaboration to the Next Level* (March 14, 2011), <https://monsanto.com/news-releases/bASF-and-monsanto-take-dicamba-tolerant-cropping-system-collaboration-to-the-next-level/> (stating that Monsanto and BASF are collaborating to facilitate further development work and subsequent commercialization of “a dicamba tolerant system, which includes innovative dicamba formulations proprietary to BASF and the dicamba tolerant trait for soybeans, which is proprietary to Monsanto” and “development of stewardship guidelines and best management practices for the dicamba tolerant system.”).

105. E.I. DuPont de Nemours and Company (“Dupont”) (itself and/or through affiliates including DuPont Pioneer, formerly Pioneer Hi-Bred) is a leading developer, producer, and marketer of soybean and corn seed, and historically, a competitor of Monsanto both as a developer of seed varieties and genetic traits.

106. Prior to 2013, Monsanto and DuPont were embroiled in litigation concerning Pioneer's use of Monsanto's technology and claims by DuPont that Monsanto engaged in various anti-competitive behavior.

107. Shortly after a large jury award to Monsanto on its claims against DuPont for patent infringement, and with DuPont's anti-trust claims still pending, Monsanto and DuPont announced in 2013 that they would enter into a deal under which Monsanto would waive the verdict and DuPont would dismiss its anti-trust claims and pay some \$1.75 billion in royalties in exchange for access to genetic technology including RR and dicamba resistance.

108. Monsanto entered into technology licensing agreements with DuPont under which DuPont, for additional royalties, could market and sell soybean seed containing Monsanto's RR2Yield, as well as the trait for dicamba resistance. Joint Press Release, *DuPont and Monsanto Reach Technology Licensing Agreements on Next-Generation Soybean Technologies* (March 26, 2013), <https://www.pioneer.com/home/site/about/news-media/newsreleases/template.CONTENT/guid.EAB5E402-FECE-0123-144E-CBC62A6D8513>.

109. Brett Begemann, Monsanto President and Chief Commercial Officer, stated that the agreement "signals a new approach to our companies doing business together . . ." Andrew Pollack, *Monsanto and DuPont Settle Fight Over Patent Licensing* (March 26, 2013), <http://www.nytimes.com/2013/03/27/business/monsanto-and-dupont-settle-fight-over-roundup-ready-technology.html>.

110. Licensing of bioengineered traits is one of Monsanto's "Key Metrics and Platform Drivers," the purpose of which is to ensure more sales and further solidify Monsanto's dominance in the market. Monsanto Fourth-Quarter FY2017 Earnings Presentation "Fiscal Year 2017 Results

and Outlook" (Oct. 4, 2017), [https://monsanto.com/app/uploads/2017/10/MonsantoCo.Q4F17\\_Earnings\\_Presentation\\_2017.10.04.pdf](https://monsanto.com/app/uploads/2017/10/MonsantoCo.Q4F17_Earnings_Presentation_2017.10.04.pdf).

111. Monsanto also entered into agreements with DuPont or its affiliates under which Monsanto supplies and DuPont markets and sells dicamba herbicide (originating with BASF and licensed to Monsanto who added "VaporGrip Technology") under its trade name FeXapan.

112. DuPont, like Monsanto and BASF, refers to seed containing the dicamba-resistant trait and dicamba herbicide as an integrated system. *See* DuPont website: EPA Approval: FeXapan™ Dicamba Herbicide Plus VaporGrip® Technology (Feb. 16, 2017), <http://www.dupont.com/products-and-services/crop-protection/soybean-protection/press-releases/dicamba-herbicide.html> ("The integrated seed [Pioneer brand soybeans with the Xtend trait] and herbicide program is designed to work together").

113. The price of seed engineered for dicamba resistance is more than seed without it.

114. The only meaningful difference between Xtend seed and other comparable RR seed is the trait for dicamba resistance. While Monsanto touts high yield of seed containing the dicamba-resistance trait, Monsanto describes that yield as "the same" as without the resistance. *See, e.g.*, Traits/Roundup Ready Xtend Crop System, <http://www.roundupreadyxtend.com/About/Traits/Pages.default.aspx> (from March 14, 2017 webpage from archive.org.) ("The same yield and quality potential farmers already know and trust from the Genuity® Roundup Ready 2 Yield Soybeans."). In a January 2016 earnings call, Monsanto's Fraley confirmed that the sole benefit of the Xtend seed is "superior weed control" as it has the "same high yield" as other RR2 varieties. Earnings Call Transcript, <http://seekingalpha.com/article/3794576-monsanto-companys-mon-ceo-hugh-grant-q1-2016-results-earnings-call-transcript> (last visited July 14, 2017).

115. There is no benefit to the Xtend trait other than resistance to dicamba, and no benefit to dicamba resistance other than in-crop use of dicamba herbicide.

116. The dicamba-based crop system designed, developed, accelerated, licensed and sold by Defendants poses unreasonable risk of harm to susceptible plants and crops not resistant to dicamba.

117. Defendants designed, developed, marketed, promoted, distributed, licensed, and sold the dicamba-resistant trait, seed containing that trait, and dicamba herbicide as an integrated crop system, knowing that it would result in damage to susceptible non-resistant plants and crops and with knowledge and intent that farmers would have no alternative but to purchase seed containing the trait as a defense, ever increasing demand and Defendants' profits.

### **C. Warnings from Scientists and Others**

118. A genetically engineered trait conferring resistance to dicamba for use with dicamba sprayed in-crop (over the top of crops after emergence from the ground) meant that dicamba would be sprayed later in the year than before – during hot summer months – and in the vicinity of susceptible non-resistant plants and crops also emerging and at high risk of damage by dicamba.

119. Weed scientists and others warned of the danger in large-scale dicamba use in summer months, dicamba's high propensity to volatilize and move onto susceptible non-resistant plants and crops, and how dicamba will accelerate evolution of superweeds.

120. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to risk that dicamba will move from target to non-target plants and crops.

121. The risk also increases based on the amount of dicamba sprayed, as it can and does remain suspended in the air, loading the atmosphere, and travels significant distances.

122. Temperature inversions are difficult to predict, can form rapidly, and are a common, frequent occurrence in each state in which Plaintiffs and other members of their respective state classes grow soybeans. There also is a high level of glyphosate-resistant weeds, and high concentration of plants and crops very sensitive to and at risk of dicamba exposure, including soybeans.

123. In 2010, for example, Steve Smith, Director of Agriculture for Red Gold (tomato processor) and Chairman of a coalition of farmers called Save Our Crops, testified before Congress that widespread use of dicamba presents “the single most serious threat to the future of the specialty crop industry in the Midwest” and would be “incompatible with Midwestern agriculture.” Steve Smith Testimony before Congress Sept. 20, 2010 Domestic Policy Subcommittee of Committee on Oversight and Government Reform at 2, 3 (<http://oversight.house.gov/wp-content/uploads/2012/01/20100930Smith.pdf>).

124. With introduction of a dicamba-tolerant soybean, Mr. Smith gave “a sure prediction that dicamba use will increase dramatically, followed by escalating crop losses.” *Id.* at 2.

125. In October 2011, scientists from Ohio State University addressed a conference in Columbus focused on dicamba. Representatives of Monsanto and BASF were in attendance. Douglas Doohan, a conference organizer, and his colleagues outlined the risk that growers would spray older dicamba versions when dicamba-resistant seed became available and that damage to non-resistant crops would lead farmers to buy dicamba-resistant seed to protect themselves. Emily Flitter, *Special Report: The decisions behind Monsanto's weed-killer crisis* (Nov. 9, 2017), <https://www.reuters.com/article/us-monsanto-dicamba-specialreport/special-report-the-decisions-behind-monsantos-weed-killer-crisis-idUSKBN1D91PZ>.

126. David Mortenson and other scientists published an article in 2012 warning not only of high risk of drift and volatility, but the negative impacts on non-target crops and vegetation, noting that risk to plants from dicamba is 75 times greater than from glyphosate. David A. Mortenson, J. Franklin Egan, Bruce D. Maxwell, Matthew R. Ryan, Richard G. Smith, *Navigating a Critical Juncture for Sustainable Weed Management*, BioScience Vol. 62, Issue 1 (Jan. 2012), <https://doi.org/10.1525/bio.2012.62.1.12>.

127. In the same article, these scientists also warned that growers and commercial applicators do not always use recommended application practices, and that new resistant cultivars “will enable growers to apply synthetic auxin herbicides several weeks later into the growing season, when higher temperatures may increase volatility and when more varieties of susceptible crops and nontarget vegetation are leafed out, further increasing the potential for nontarget drift damage.” *Id.*

128. They also warned about weed resistance and sustainability of a dicamba-based crop system, recognizing that “once an initial number of growers in a region adopts [seed with dicamba-resistance] the remaining growers may be compelled to follow suit in order to reduce the risk of crop injury and yield loss.” *Id.* In other words, damage to non-target plants “could create a strong incentive for growers to plant resistant seeds as insurance against crop damage from herbicide drift or applicator mistakes, even if they are not interested in applying synthetic auxin herbicides themselves. This effect could further augment the portion of the seed market and of the landscape garnered by the resistant seed varieties, which would reduce genotypic diversity and restrict farmers’ access to different crop varieties.” *Id.*

129. Weed scientists and others also have warned that in-crop use of dicamba will lead to evolution of dicamba-tolerant superweeds. Union of Concerned Scientists, *The Rise of*

*Superweeds – and What to Do About It* (Dec. 2013), [https://www.ucsusa.org/food\\_and-agriculture/our-failing-food-system/industrial-agriculture/the-rise-of-superweeds.html#](https://www.ucsusa.org/food_and-agriculture/our-failing-food-system/industrial-agriculture/the-rise-of-superweeds.html#).

WxGrruSWyUk.

130. Ford Baldwin asked Monsanto representatives at meetings at least as early as 2013 how Monsanto was going to manage the off-target issues with dicamba. The answer was that “everyone will just have to plant Xtend crops, and then it won’t be an issue.” *Bader Farms, Inc. v. Monsanto Co.*, No. 1:16-CV-00299 (E.D. Mo.) (“*Bader Farms*”), Baldwin Dep. Tr. (Oct. 31, 2017) at 19:23-20:6. As Baldwin described it, the technology is all or nothing: “We’re either going to plant all the acres to dicamba crops, or none. And they’ve never really denied that.” *Id.* at 20:6-12.

#### **D. Requests for EPA Registration**

131. On April 29, 2010, Monsanto applied to the Environmental Protection Agency (EPA) for registration of M-1691 Herbicide, a diglycolamine (DGA) salt of dicamba – a formulation sold by BASF as Clarity herbicide – supposedly less volatile than older formulations.

132. On July 30, 2012, Monsanto applied for EPA registration of M-1768 Herbicide, also the DGA dicamba salt (Clarity), with “VaporGrip Technology,” supposedly further lowering volatility, for use over the top of soybean and cotton grown with seed containing the dicamba-resistant trait.

133. BASF announced on April 10, 2012 that it had applied for EPA registration of Engenia herbicide, stating that it would be “an effective weed control system enabled by dicamba-tolerant crops currently in development.” Press Release, *BASF submits application for registration of new Engenia™ herbicide* (April 10, 2012), <https://www.bASF.com/us/en/company/news-and-media/news-releases/2012/04/p-12-079.html>.

**E. Inadequate Testing**

134. In early 2012, scientists from Pennsylvania State University warned that “[h]erbicide-resistance biotechnology may expand the risks of injury to nontarget crops and vegetation by enabling dicamba to be applied to new crops, over an expanded growing season, and over significantly larger areas” than before, and expressing the need for proactive research to determine environmental risks, including volatilization of dicamba. J. Franklin Egan and David A. Mortensen, Dept. of Crop and Soil Sciences, Penn. State Univ., *Quantifying Vapor Drift of Dicamba Herbicides Applied to Soybean* (published online Feb. 23, 2012), [https://monsanto.com/app/uploads/2017/09/03\\_-Egan\\_volatility\\_2012.pdf](https://monsanto.com/app/uploads/2017/09/03_-Egan_volatility_2012.pdf).

135. Typically, when a company develops a new agricultural product, it conducts or commissions its own testing, shared with regulators, and also provides product samples to universities for additional review. Monsanto, however, refused independent volatility testing of XtendiMax. Monsanto repeatedly denied university requests to research volatility of the herbicide, including the University of Arkansas, the University of Missouri and the University of Illinois. Monsanto did provide samples of XtendiMax so researchers could test effectiveness, but expressly forbade testing for volatility.

136. This kind of restriction is contrary to industry practice. According to Jason Norsworthy, weed scientist from the University of Arkansas: “This is the first time I’m aware of [that] any herbicide [was] ever brought to market for which there were strict guidelines on what [he] could and could not do.” Emily Flitter, *Scant oversight, corporate secrecy preceded U.S. weed killer crisis* (Aug. 9, 2017), <https://www.reuters.com/article/us-usa-pesticides-dicamba-insight/scant-oversight-corporate-secrecy-preceded-u-s-weed-killer-crisis-idUSKBN1AP0DN>.

137. The new dicamba formulations were not adequately tested for sufficient time or under real-world conditions in areas in which they would be sold. Among other things, there was no or inadequate multiple-exposure testing or modeling of large-scale spraying as would occur in areas where usage would predictably be high and in accordance with soil, weather and inversion conditions in those areas.

138. For example, and according to publicly available EPA documents, Monsanto field tested XtendiMax with “VaporGrip Technology” in only two locations – Texas and Georgia – involving specific soil types, only a few acres, and a limited time span. It also relied on laboratory-based testing in controlled environments (Humidome and Hoop House methods) that did not and does not replicate actual conditions under which the dicamba would be applied.

139. Information to date also indicates that Monsanto limited many (if not most) of its tests to 24 hours. On a website page entitled “Dicamba-based Herbicide XtendiMax® with VaporGrip® Technology: Years in the Making,” Monsanto outlined three volatility tests, two of which (Humidome and Hoop House methods) were expressly limited to 24 hours. Alison MacInnes, *Monsanto Research Chemist, Dicamba-based Herbicide XtendiMax® with VaporGrip® Technology: Years in the Making* (July 13, 2017), <https://monsanto.com/products/product-stewardship/articles/dicamba-xtendimax-vaporgrip-technology/>. In addition, tests in the patent which appears to cover the VaporGrip Technology discussed test results limited to 24 hours. U.S. Patent No. 9,402,396 at Examples 31, 32 and 34 (filed Aug. 2, 2016) (available at <http://patft.uspto.gov>).

140. Later independent testing, however, confirms that the new dicamba formulations can and do volatilize after 24 hours. At an Arkansas Plant Board meeting, even a Monsanto representative conceded that volatility occurs from 24-72 hours. *See* Arkansas Farm Bureau

Federation Task Force Meeting (video), <https://www.facebook.com/ArkansasFarmBureau/videos/10159178698590321> (last visited Oct. 18, 2017).

141. In January 2017, the Arkansas Joint Budget Committee met to discuss regulation of the new dicamba formulations. Discussion included Monsanto’s repeated refusal to allow third-party testing of its VaporGrip Technology. Monsanto’s Boyd Carey was on record as saying that neither the University of Arkansas nor any other university was allowed to test VaporGrip for fear that the results might jeopardize the federal label.

#### **F. Defendants’ Aggressive and Misleading Advertising**

142. Well in advance of commercialization, Monsanto and BASF were aggressively promoting the Xtend Crop System, playing on farmers’ concern over glyphosate resistance and offering the new dicamba-based system as the panacea.

143. BASF ominously warned that “[f]armers have only a few post-applied options in soybeans” but reassured that “Engenia offers an additional site of action for post-emergence control, and can also be used preemergence . . . giving farmers maximum application flexibility to target key weeds.” Press Release, *BASF submits application for registration of new Engenia™ herbicide* (April 10, 2012), <https://www.bASF.com/us/en/company/news-and-media/news-releases/2012/04/p-12-079.html>.

144. Monsanto and BASF promoted the dicamba crop system as a “breakthrough” that would provide an “invaluable asset for weed resistance management and a cornerstone of sustainable agriculture” to combat “yield-robbing weeds.” Joint Press Release (BASF from Germany and Monsanto from St. Louis), *BASF and Monsanto Announce Progress in Dicamba Formulations* (Nov. 2, 2010), <https://monsanto.com/news-releases/bASF-and-monsanto-announce-progress-in-dicamba-formulations/>.

145. Even before USDA deregulation, Monsanto was marketing Xtend soybeans with an initiative it called “Follow-a-Field” which targeted farmers and focused on the benefits of over-the-top applications of dicamba: “The Follow-A-Field program will showcase three farmers who will tell the story of how the system works on their farm. These farmers will share their own experience with the system and application requirements, as well as show the advantages of incorporating dicamba into their weed control plans.” Monsanto Press Release, *Monsanto Announces Follow-A-Field Initiative to Educate Growers on the Roundup Ready 2 Xtend Soybeans* (Aug. 28, 2013), <http://www.corn-states.com/News/Pages/Monsanto%20Announces-Follow-A-Field-Initiative-to-Educate-Growers-on-the-Roundup-Ready-2-Xtend%20Soybeans.aspx> (quoting Michelle Vigna, Monsanto Roundup Ready Xtend launch manager).

146. The purpose of all this pre-launch advertising was to escalate anticipation and entice and influence farmers to purchase the Xtend technology as soon as possible.

147. Not only was the advertising aggressive in its purpose of convincing farmers that a dicamba-based system is the panacea for weed control, but in assuring farmers that the dicamba herbicides can be applied to stay on target without damaging non-resistant plants and crops.

148. For example, in a November 2010 joint press release, Monsanto (from St. Louis) and BASF (from Germany) stated that the “dicamba tolerant system” would give growers pre- and post-emergence application flexibility and that new dicamba formulations would result “in better performance and safety to nearby crops.” Joint Press Release, *BASF and Monsanto Announce Progress in Dicamba Formulations* (Nov. 2, 2010), <https://monsanto.com/news-releases/bASF-and-monsanto-announce-progress-in-dicamba-formulations/>.

149. In a March 14, 2011 joint press release, BASF’s Markus Heldt represented that the new crop system “will ultimately deliver peace of mind for growers.” Joint Press Release (from

Germany and St. Louis), *BASF and Monsanto Take Dicamba Tolerant Cropping System Collaboration to the Next Level* (Mar. 14, 2011), <https://www.prnewswire.com/news-releases/bASF-and-monsanto-take-dicamba-tolerant-cropping-system-collaboration-to-the-next-level-117927054.html>

150. In an April 10, 2012 press release, Paul Rea, Vice President of BASF's Crop Protection Division, extolled Engenia as "an important new tool" in "fighting herbicide resistance" and represented that "field research shows [that Engenia] will offer excellent weed control and crop safety, as well as low-volatility characteristics for improved on target application." News Release, *BASF submits application for registration of new Engenia™ herbicide* (April 10, 2012), <https://www.bASF.com/us/en/company/news-and-media/news-releases/2012/04/p-12-079.html>.

151. In 2012, BASF's Markus Heldt represented: "The newly formulated herbicide has minimized volatility . . . We are not playing with a chemistry that is dangerous." Carey Gillam, *INTERVIEW-BASF sees strong growth tied to GMO crop traits* (June 7, 2012), [http://articles.chicagotribune.com/2012-06-07/news/sns-rt-bASF-gmofood-interview11e8h6alf-20120607\\_1\\_crop-traits-droughtgard](http://articles.chicagotribune.com/2012-06-07/news/sns-rt-bASF-gmofood-interview11e8h6alf-20120607_1_crop-traits-droughtgard).

152. Also in 2012, BASF represented that Engenia "will offer excellent weed control and crop safety, as well as low-volatility characteristics for improved on-target application." Press Release, *BASF submits application for registration of new Engenia™ herbicide* (April 10, 2012), <https://www.bASF.com/us/en/company/news-and-media/news-releases/2012/04/p-12-079.html> (quoting Paul Rea, BASF).

153. Also in 2012, Monsanto was advertising that "LOW VOLATILITY FORMULATIONS [ARE] COMING SOON" to "maximize crop yield potential" and that the

“Xtend Crop System is developed around application methods proven to increase on target applications.” Monsanto Brochure (July 2012).

154. Monsanto sent out a flyer in 2012 encouraging farmers to send comments supporting Xtend seed, telling them that they should be able to “use safe and valuable new agricultural technologies to increase yields and keep their farms profitable” and that farmers “have proven they are able to use different application techniques and equipment for different types of pesticides to ensure . . . on target application.” Monsanto Flyer, *Support Farmers’ Choice To Access New Technologies* (2012).

155. In reality, however, application techniques *do not* prevent dicamba from volatilizing and moving distances to non-resistant fields, and application instructions for the new formulations are not the understandable, routine techniques implied.

156. All such representations were false, misleading and deceptive as, among other things, portraying the new formulations as safe when they are not, omitting that even the new formulations of dicamba are still volatile, and as further detailed *infra*, Paragraphs 243-244, 247-48, 252-53.

#### **G. Ineffective, Insufficient Stewardship**

157. Monsanto and BASF both recognize their role and responsibilities as self-professed innovators and promoters of herbicides and crops genetically modified to withstand them.

158. Monsanto pledges that it “places the highest priority on the responsible development, manufacture and use of crop protection products.” Product Stewardship and The Pledge, <https://monsanto.com/products/product-stewardship/stewardship-pledge/> (last visited Dec. 19, 2017).

159. Monsanto represents that it adheres to “the responsible development, management and use of technologies and products across our seeds, traits, and crop protection businesses through the entire product life cycle.” Product Stewardship, <https://monsanto.com/products/product-stewardship/> (last visited Dec. 19, 2017).

160. According to Monsanto, “[s]tewardship is the shared responsibility of Monsanto and those who provide, handle and use our products . . . We want to ensure our products continue to be used properly. By following product life cycle stewardship processes, we stand behind our products from research and discovery to discontinuation and disposal.” Monsanto Website, Product Stewardship Safety, <https://monsanto.com/products/product-stewardship/product-stewardship-safety/> (last visited Dec. 19, 2017).

161. Discussing concerns over dicamba damage in 2017, Monsanto described farmers as “the lifeblood of our company and our first priority.” Brian Naber, *Dicamba Field Investigations: What Monsanto Has Learned So Far* (July 26, 2017), <http://www.greatlakeshybrids.com/agronomy/agronomy/agronomy/2017/07/26/dicamba-field-investigations-what-monsanto-has-learned-so-far>.

162. BASF maintains that it “has a long heritage of being a reliable partner to farmers.” BASF Website <https://agriculture.bASF.com/en/Crop-Protection.html> (last visited May 22, 2018).

163. BASF states that it is “committed to successfully support farmers with innovative and sustainable solutions. BASF Website, <https://www.bASF.com/campaigns/en/the-biggest-job-on-earth.html> (last visited May 22, 2018), and that it is “dedicated to continuously minimizing the negative influences of our products on safety, health and environment along the value chain – from development to disposal.” BASF Product Stewardship and Global Product Strategy

(<https://www.bASF.com/us/en/company/sustainability/management-and-instruments/responsible-care/product-stewardship-and-global-product-strategy.html>) (last visited May 22, 2018).

164. Monsanto understands that “[m]aking on-target applications and managing the potential for off-site movement are crucial when using an herbicide.” Alison MacInnes, Monsanto Research Chemist, *Dicamba-based Herbicide XtendiMax® with VaporGrip® Technology: Years in the Making* (July 13, 2017), <https://monsanto.com/products/product-stewardship/articles/dicamba-xtendimax-vaporgrip-technology/>.

165. BASF understands that crop protection products must not only be effective and not damage the target plant, but also “must not be harmful to health or to the environment.” BASF Brochure, *Passion for Agriculture* (BASF SE/Global Communications, 2016), <https://industries.bASF.com/assets/global/corp/en/Agriculture/Crop%20Protection/Brochure%20Crop%20Protection%20Englisch.pdf>.

166. Luke Bozeman, BASF technical market manager with Engenia, stated: “[W]e want to make sure [growers] have all the tools necessary and all the knowledge necessary to make an application that does not allow any spray drift onto their neighbor’s crops.” Ag Professional, *Engenia specific for dicamba-resistant crops* (April 30, 2014), <https://www.agprofessional.com/article/engenia-specific-dicamba-resistant-crops>.

167. Monsanto represents and embraces its responsibility to “explain[] and promote[] proper and responsible” use of its products. *Product Stewardship*, <http://www.aganytime.com/stewardship/Pages/default.aspx>.

168. BASF represents and embraces a “long-standing stewardship responsibility to growers,” providing “one-of-a-kind” education. *BAPMA dicamba delivers unique chemistry to*

soybean and cotton fields, <http://www.agweb.com/article/bapma-dicamba-delivers-unique-chemistry-to-soybean-and-cotton-fields-naa-sponsored-content/>.

169. Monsanto states that it is “committed to the success and safety of our growers. By promoting proper and responsible uses of our technologies, we aim to ensure environmental standards are met and the safety of our people and communities is protected.” *Stewardship for Roundup Ready® Xtend Crop System*, <https://www.roundupreadyxtend.com/stewardship/Approvals-Map/Pages/default.aspx>.

170. Defendants did and do know that training and stewardship tools provided to users of the Xtend Crop System is minimally necessary for protection of not just those growers (with resistant and non-resistant fields) but of others with plants and crops not resistant to dicamba and significantly at risk by exposure to it.

171. Nevertheless, Defendants failed to provide adequate education, training, and stewardship tools, increasing the risk of dicamba damage.

172. Users of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans.

173. Soybeans, for example, are some 200 times more sensitive to dicamba than corn is to glyphosate. Scales published by Dr. Stanley Culpepper indicate that even plants less sensitive to dicamba than soybeans can be injured by 1/75 of the labeled rate. Plants extremely sensitive, including soybeans, can be injured by 1/800X of the labeled rate. Testing from the University of Nebraska shows that injury can reduce yields at exposures of 1/500 and 1/1000 of the label rate. To illustrate such rates on a per-acre basis, one-tenth of the label rate is equivalent to 3 tablespoons, and one-hundredth of the label rate is equivalent to 1 teaspoon, applied over the size of a football

field (1 acre). Recent research by Dr. Kevin Bradley, weed scientist at the University of Missouri, indicates symptoms at 1/20,000 of a 1x (0.5 lb. ae/acre) field use rate.

174. As articulated by Aaron G. Hager, professor of crop sciences at the University of Illinois: “When you say ‘low volatility’ five times fast you think there are no issues with volatility, but that is not correct . . . Soy is so sensitive to very small amounts of dicamba. It is an amount like the spray when you open a can of Coke - but spread over an acre.” Melody Bomgardner, *Widespread crop damage from dicamba herbicide fuels controversy*, August 16, 2017 (Chem. and Engineering News, Vol. 95 Issue 33 (Aug. 21, 2017), <https://cen.acs.org/articles/95/i33/Widespread-crop-damage-dicamba-herbicide.html>

175. It has been estimated that while one-eighth of a quart of glyphosate “will cause 20 percent damage to susceptible vegetation . . . you get 20 percent damage at one-fifteen-hundredth of a pint of dicamba.” According to University of Tennessee weed specialist Larry Steckel, “That’s a game changing difference.” Elton Robinson, *New Herbicide Tech Demands New Nozzle Thinking – 10 Quick Points*, <http://agfaxweedsolutions.com/2017/01/12/new-herbicide-tech-demands-new-nozzle-thinking-10-quick-points/> (last visited Dec. 19, 2017).

176. Monsanto enters into a technology licensing agreement (“Stewardship Agreement”) with every person or entity purchasing seed containing the dicamba-resistant trait. Monsanto could have made dicamba-specific application training a requirement of purchasing such seed but did not.

177. Neither was any special certification required for in-crop application of dicamba herbicides prior to the 2018 crop season.

178. Conditions ripe for dicamba movement such as temperature inversions are difficult to predict. Monsanto and BASF have now both introduced smart phone applications designed to

assist in predicting weather conditions and when a temperature inversion will occur. They did not, however, offer that technology before 2018 (which even if reliable, does not stop movement through inversion as dicamba can volatilize over several days).

#### **H. Dicamba Damage in 2015 and 2016**

179. Dicamba-resistant soybean and cotton seed were deregulated by the USDA on or about January 14, 2015, meaning that there would be no further regulation by that agency.

180. At that point, however, there was no registration from the EPA for any “low” volatility dicamba for use over the top of growing plants.

181. Originally, Monsanto indicated that release of seed containing the dicamba-resistant trait would not occur until “regulatory approval” was obtained from the EPA for in-crop application of dicamba. News Release, *Strong Harvest Results Demonstrate Monsanto Company’s Position As Industry Yield Leader; Chief Technology Officer Robb Fraley Presents Final 2012 Product Performance Data* (Nov. 28, 2012) (<http://news.monsanto.com/press-release/strong-harvest-results-demonstrate-monsanto-companys-position-industry-yield-leader-ch>); Monsanto’s Earnings Call Transcript by CEO, Hugh Grant on Q2 2015 Results (Apr. 1, 2015), at 7-8 (<https://seekingalpha.com/article/3045726-monsantos-mon-ceo-hugh-grant-on-q2-2015-results-earnings-call-transcript?part=single>); Michael J. Frank Presentation at Wells Fargo Industrial & Constr. Conf. (May 6, 2015), Slide #11 & fn. 1 ([https://monsanto.com/app/uploads/2017/05/2015.05.06\\_wells-fargo-frank.pdf](https://monsanto.com/app/uploads/2017/05/2015.05.06_wells-fargo-frank.pdf)); Dr. Robb Fraley Presentation at 2015 Citi Basic Materials Conference (Dec. 2, 2015), Slide #13 & fn. 1 ([https://monsanto.com/app/uploads/2017/05/citi\\_fraley\\_2015.12.02.pdf](https://monsanto.com/app/uploads/2017/05/citi_fraley_2015.12.02.pdf)).

182. Monsanto, however, commercialized Xtend cotton for the 2015 growing season, in what it described as a “limited introduction” of 500,000 acres, despite lack of EPA registration for in-crop application of dicamba.

183. Monsanto and BASF entered into one or more agreements for the design, development, and commercialization of the dicamba-resistant trait and seed containing it. BASF is a joint venture with Monsanto, and moreover, if not itself a seller thereof, Monsanto commercialized and sold the trait and seed on behalf of itself and as agent for BASF, which shared in profits therefrom.

184. Because the EPA had not yet registered a supposed low-volatility version of dicamba herbicide, farmers were unable to buy corresponding dicamba herbicide registered for in-crop use on Xtend cotton.

185. This situation was unprecedented and contrary to standard industry practice. *See* Marci Manley, *Illegal Chemical Use Damages Soybeans, Threat of Spread Outside Ag* (Aug. 1, 2016), <http://www.kark.com/news/local-news/working-4-you-illegal-chemical-use-damages-soybeans-threat-of-spread-outside-ag/521534160> (“Many in the industry say they have never seen a company release a two-part system with only one component approved.”).

186. Dr. Bob Scott of the University of Arkansas explained: “It’s an odd situation because we can’t recall a technology like this being released without a corresponding herbicide. We had Roundup Ready, Liberty Link - none released without a herbicide.” David Bennett, *Dicamba drift incidents have ripple effect* (July 21, 2016), <http://www.deltafarmpress.com/print/27874>.

187. Monsanto and BASF knew that farmers were spraying older versions of dicamba over the top of Xtend cotton in 2015.

188. Monsanto's public stance was that older, highly volatile and drift-prone dicamba herbicides were not to be used over the top of crops grown with dicamba-resistant seed. Monsanto representatives, however, advised farmers to do just the opposite – to spray existing dicamba products over the top of their Xtend cotton in 2015.

189. For example, in testimony before the Arkansas State Plant Board, Donald E. Masters stated that a Monsanto representative told him to spray dicamba on his Xtend crops. In testimony given in *Bader Farms*, No. 1:16-CV-299 SNLJ (E.D. Mo.), Masters said that Monsanto's representative knew he wanted Xtend seed so he could spray dicamba over the top and told him how much dicamba the seed would tolerate.

190. BASF's sales of older versions of dicamba increased in time periods corresponding to commercialization of dicamba-resistant seed before any dicamba had been registered for in-crop use. In investor conference calls, BASF for the first time in February 2015 (one month after USDA deregulation of dicamba-resistant cotton and soybean in January 2015) began identifying dicamba as a high-demand, strong-selling herbicide. As of February 2015, BASF told investors that North American sales were “up strongly” and expressly identified dicamba as a particular herbicide with “high demand” driving the sales increase. As of October 2015, BASF stated that it “experienced a good business development for fungicides and herbicides, especially for Dicamba.” BASF 3<sup>rd</sup> Quarter 2015 Analyst Conference Call Tr. (Oct. 27, 2015) at 25. As of October 2016, BASF stated: “We were able to raise volumes, especially of the herbicides Kixor® and dicamba.” BASF 3<sup>rd</sup> Quarter 2016 Analyst Conference Call Tr. (Oct. 27, 2016) at 27.

191. It otherwise was foreseeable, and predicted, that farmers purchasing Xtend seed would spray older versions of dicamba given, among other things, that the very purpose of that seed is in-crop use of dicamba herbicide.

192. When asked whether releasing bioengineered seed without registered corresponding herbicide was normal practice, Dr. Kevin Bradley, Professor of Plant Sciences at University of Missouri, answered “No.” He went on: “Many have said and I would agree that is part of the problem. We have a trait without [a] corresponding herbicide to go with it. Allegedly, a certain number of farmers have said, ‘I’m gonna spray the old herbicide because I have this trait out here [in the fields] and you won’t give me the new stuff.’” Aug. 31, 2016 Missouri House Select Committee on Agriculture Special Hearing at Fisher Delta Research Center in Portageville, Mo. (“Missouri House Committee Hearing”).

193. By releasing Xtend cotton seed in 2015, claiming greater yields, preying on farmers’ worry over glyphosate-resistant weeds, and extolling dicamba, Monsanto, as well as BASF, were enticing farmers to not only purchase Xtend seed but to use older versions of dicamba.

194. As one farmer described it: “It’s like putting ice cream in front of a kid and telling them they can’t eat it . . . All these farmers heard when it came to this system appears to be ‘higher yields’ and ‘dicamba-resistant.’” Marci Manley, *Illegal Chemical Use Damages Soybeans, Threat of Spread Outside Ag* (Aug. 1, 2016), <http://www.kark.com/news/local-news/working-4-you-illegal-chemical-use-damages-soybeans-threat-of-spread-outside-ag/> 521534160.

195. Predictably, farmers did spray the older versions and damage to non-resistant crops occurred.

196. Defendants knew that crop damage was more than likely to occur as a direct result of the Xtend cotton release in 2015.

197. Farmers did experience dicamba damage in 2015.

198. Monsanto and BASF, however, continued full bore with their plans. In an interview, Monsanto’s Vice President of Global Strategy, Scott Partridge, stated that Monsanto

bred the dicamba-resistant trait into its entire stock of soybeans, and waiting meant that Monsanto would “not sell a single soybean in the United States” in 2016. Emily Flitter, *The decisions behind Monsanto’s weed-killer crisis* (Nov. 9, 2017), <https://uk.reuters.com/article/uk-monsanto-dicamba-specialreport/the-decisions-behind-monsantos-weed-killer-crisis-idUKKBN1D91Q9>.

199. Defendants’ focus was not on just the initial release of dicamba-resistant seed, but the escalation in demand of both seed and herbicide.

200. As of 2015, Monsanto was anticipating enormous, rapid penetration. It projected a 3 million-acre launch of Xtend seed that, by 2019, would reach 2/3 of U.S. acres. *See* Monsanto Fiscal Year 2015 Results and Fiscal Year 2016 Outlook (Oct. 7, 2015), Slides 7 & 15, [https://monsanto.com/app/uploads/2017/05/2015.10.06\\_mon\\_q4f15\\_earnings.pdf](https://monsanto.com/app/uploads/2017/05/2015.10.06_mon_q4f15_earnings.pdf).

201. Monsanto described the years ahead as “a period of rapid acceleration with new [dicamba] technology penetration,” *id.* at Slide 16, which included 80-100 million acres of dicamba production capacity, and 200-250 million overall acres planted with Xtend traits by 2025. *Id.* at Slide 10; *see also* Carey Gillam, *Monsanto to invest more than \$1 bln in dicamba herbicide production* (June 24, 2015), <https://www.reuters.com/article/monsanto-dicamba/monsanto-to-invest-more-than-1-bln-in-dicamba-herbicide-production-idUSL1N0ZA1XN20150624> (Monsanto predicting a 200 million-acre penetration of Xtend system for soybeans and cotton in the Americas).

202. BASF had, by June 2014, already announced plans to expand its herbicide production capability in the U.S. and boost production of its dicamba weed killer by 50% to keep pace with anticipated demand should Monsanto receive USDA deregulation of the new bioengineered soybean and cotton traits.

203. In 2014, BASF stated: “We foresee a peak sales potential of €2,300 million for these products, which represents an increase of €200 million compared with the previous year.” BASF Online Report 2014, *Innovations in the segments – examples* (under Agricultural Solutions), <https://report.bASF.com/2014/en/management-report/innovation/innovations-in-the-segments.html>.

204. As of 2015, Monsanto already had announced plans for the direct and licensed release of some 70 varieties of soybeans with the dicamba-resistant trait, as well as plans to invest approximately \$1 billion in a new production facility for dicamba herbicide in Luling, Louisiana.

205. As with the 2015 release of Xtend cotton, there was no dicamba herbicide registered for in-crop use in 2016.

206. Monsanto had the ability to terminate the license of any grower violating terms and conditions of the Stewardship Agreement and addenda (including its Technology Use Guide), and can refuse further sale of seed.

207. Monsanto and BASF knew that growers were spraying dicamba unregistered for in-crop use over crops grown with dicamba-resistant seed.

208. Monsanto considered but took no action as to growers who did so. See Marci Manley, *Illegal Chemical Use Damages Soybeans, Threat of Spread Outside Ag* (Aug. 1, 2016), <http://www.kark.com/news/local-news/working-4-you-illegal-chemical-use-damages-soybeans-threat-of-spread-outside-ag/521534160> (“Representatives from Monsanto at the meeting [with the Arkansas Plant Board] said the company wasn’t taking enforcement action against growers who use the chemical illegally, though it was considering it.”).

209. Donald Masters testified at deposition in *Bader Farms* that despite knowledge of his spraying, Monsanto made no effort to investigate, examine his records of spraying, or show

any interest at all in his spraying. *See Bader Farms*, Masters Dep. Tr. (Sept. 20, 2017) at 145:16-149:3, 150:5-8, 151:18-152:8.

210. Monsanto did not cancel a single license with growers who used dicamba herbicide unregistered for in-crop use. *See* Chris Bennett, *Dicamba Questions Cloud 2017 Horizon* (Jan. 30, 2017), <https://www.agweb.com/article/dicamba-questions-cloud-2017-horizon-naa-chris-bennett/> (“Despite the rash of off-target incidents, Monsanto acknowledges no grower licenses were pulled due to illegal applications of dicamba in 2016.”). Neither did it refuse to sell Xtend seed to such growers. Doing either would have undermined its scheme with BASF to corner the market, propelled by damage to off-target plants and crops.

211. Despite the prior year’s damage from Xtend cotton, Monsanto released Xtend soybeans for the 2016 growing season, telling farmers that approval of new “low” volatility dicamba herbicide was “imminent.” Monsanto Q1 2016 Results Earnings Call Transcript (Jan. 6, 2016), <https://seekingalpha.com/article/3794576-monsanto-companys-mon-ceo-hugh-grant-q1-2016-results-earnings-call-transcript>.

212. DuPont, through its subsidiary Pioneer and under license from Monsanto, also launched varieties of soybean with RR2 Xtend technology in 2016.

213. As in 2015, it was foreseeable and indeed expected and foreseen that farmers would spray older dicamba formulations over the top of dicamba-resistant crops, and that sale of dicamba-resistant soybean seed, together with continued sale of dicamba-resistant cotton seed in 2016, would lead to further dicamba damage to susceptible non-resistant crops.

214. Industry experts predicted that Xtend’s premature release would result in such damage. University of Arkansas weed scientist Jason Norsworthy, who had warned of the danger for years, stated: “There was no blind-siding. We knew this was likely to be a major issue. We’ve

been telling the Plant Board this for several years now. We've been saying it at all the winter meetings." David Bennett, *Dicamba drift expected, no 'blind-siding'* (Aug. 15, 2016), <http://www.deltafarmpress.com/print/28005>.

215. Not only did damage result in 2016, it was on a much larger scale with both dicamba-resistant cotton and soybeans on the market. The scale of damage to non-target plants and crops in 2016 was a "huge issue," according to Kevin Bradley, University of Missouri. David Bennett, *Improper dicamba use leaves Mid-South a multitude of drift cases* (July 21, 2016), <http://www.deltafarmpress.com/print/27867>.

216. According to Arkansas weed expert Dr. Ford Baldwin: "It looks like a bomb went off in some parts of the South." Pam Smith, *Dicamba: The 'Time Bomb' Went Off and No One Was Prepared – DTN* (Dec. 29, 2016), <https://agfax.com/2016/12/29/dicamba-the-time-bomb-went-off-and-no-one-was-prepared-dtn/>.

217. In 2015 and 2016, there was no dicamba herbicide on the market that could be used safely over the top of growing plants.

218. Even had the new formulations been available, they also are unsafe.

219. Consequent harm to non-resistant crops, however, does not thwart Defendants' goals. To the contrary, it furthers them both short and long term.

220. Monsanto and BASF profited from sale of the Xtend technology and seed containing it. BASF profited from sales of its older dicamba formulations like Banvel and Clarity, among others, used over the top of dicamba-resistant seed.

221. BASF did not warn, remove or restrict its older dicamba formulations but rather, increased those sales. Both Banvel and Clarity were sprayed over the top of Xtend seed in at least 2016. *See* Pam Smith, *Dicamba: The 'Time Bomb' Went Off and No One Was Prepared – DTN*

(Dec. 29, 2016), <https://agfax.com/2016/12/29/dicamba-the-time-bomb-went-off-and-no-one-was-prepared-dtn/>.

222. Monsanto and BASF also gained from damage to non-resistant crops, which, as predicted, would and did pressure farmers to purchase dicamba-resistant seed for defensive reasons, leading to more sales of dicamba herbicides and so on.

223. Monsanto and BASF were well aware of what would happen with a launch of the full Xtend Crop System.

#### **I. Full Scale Dicamba-System Rollout in 2017**

224. EPA registration for the new formulations of in-crop dicamba herbicides came after harvest in 2016.

225. On August 31, 2016, the Missouri House Select Committee on Agriculture held a special hearing in an effort to gather information and assess the problem and ramifications of dicamba and its impact on sensitive crops. Speakers included Duane Simpson, head of Monsanto's government affairs team. Among other things, Mr. Simpson stated that training on XtendiMax would not begin until the label was finalized, even while recognizing "an urgency for training." Missouri House Committee Hearing.

226. Dr. Kevin Bradley testified at the hearing, repeating warnings from several years earlier, that farmers would have no choice but to buy seed with the Xtend technology to protect themselves. *Id.*

227. On July 25, 2016, the Arkansas Plant Board met in Little Rock, Arkansas to review policies on dicamba and 2,4-D. It held a three-hour public hearing on November 21, 2016, at which the Board unanimously passed a rule to ban use of XtendiMax in the state. This later was approved by Executive Order and a legislative panel.

228. Notwithstanding continued warnings, and the crop damage that occurred in 2015 and 2016, the much-touted Xtend Crop System, consisting of seed containing the dicamba-resistant trait and in-crop dicamba herbicide became fully available for 2017.

229. On November 9, 2016, Monsanto received a two-year conditional registration from the EPA for use of XtendiMax over the top of soybean and cotton crops grown from seed containing the dicamba-resistant trait. This is BASF's formulation with addition of "VaporGrip Technology."

230. On or about December 20, 2016, BASF received a two-year conditional registration from the EPA for use of Engenia over the top of soybean and cotton crops grown from seed containing the dicamba-resistant trait.

231. Monsanto entered into agreements with DuPont under which Monsanto supplied DuPont with, and allowed it to market and sell XtendiMax with VaporGrip Technology under DuPont's trade name FeXapan.

232. Monsanto and DuPont issued a joint press release in July 2016 regarding their multi-year dicamba supply agreement, which Mike Frank, Monsanto vice president, said "represent[ed] continued commitment to the Roundup Ready® Xtend Crop System." Joint Press Release, *Monsanto and DuPont Sign Dicamba Supply Agreement* (July 7, 2016), <http://www.dupont.com/corporate-functions/media-center/press-releases/monsanto-dupont-sign-dicamba-supply-agreement.html> (last visited Dec. 19, 2017).

233. Monsanto's supply agreement with companies like DuPont also is one of Monsanto's "Key Metrics and Platform Drivers." Monsanto Fourth-Quarter FY2017 Earnings Presentation "Fiscal Year 2017 Results and Outlook" (Oct. 4, 2017), [https://monsanto.com/app/uploads/2017/10/MonsantoCo.\\_Q4F17\\_Earnings\\_Presentation\\_2017.10.04.pdf](https://monsanto.com/app/uploads/2017/10/MonsantoCo._Q4F17_Earnings_Presentation_2017.10.04.pdf) (at 12).

234. Monsanto's supply to DuPont, as well as its own and BASF's herbicide sales, were intended to and do further promote penetration of the market and increased sale of seed containing the dicamba-resistant trait, in turn encouraging more sales of the herbicide.

235. On or about February 16, 2017, DuPont received a two-year conditional registration from EPA for use of FeXapan with VaporGrip Technology over the top of soybean and cotton crops grown from seed containing the dicamba-resistant trait.

236. An EPA registration is not an endorsement of an herbicide. *See, e.g.*, Notice of Registration for Engenia dated Dec. 20, 2016 ("Registration is in no way to be construed as an endorsement or recommendation of this product by the Agency"), [https://www3.epa.gov/pesticides/chem\\_search/ppls/007969-00345-20161220.pdf](https://www3.epa.gov/pesticides/chem_search/ppls/007969-00345-20161220.pdf).

237. All these companies continued to market the in-crop dicamba as an integrated crop system with seed containing the dicamba-resistant trait.

238. Monsanto in 2017 launched XtendiMax as a low-volatility dicamba formulation with VaporGrip Technology for use with seed containing the dicamba-resistant trait.

239. BASF in 2017 launched Engenia as a low-volatility dicamba formulation for use with seed containing the dicamba-resistant trait, which BASF promotes in its own advertising as "Dicamba-tolerant soybean sold under the trait name Roundup Ready 2 Xtend Soybeans." BASF Website, *Introducing the Most Flexible and Advanced Dicamba for Dicamba-Tolerant Crops*, <http://agproducts.bASF.us/campaigns/engenia/assets/pdf/Engenia-Soybeans-National-TIB.pdf> (last visited Dec. 19, 2017).

240. DuPont in 2017 launched FeXapan as a low-volatility dicamba formulation with VaporGrip Technology for use with Xtend seed, which DuPont promotes as part of its own advertising as "part of the Roundup Ready 2 Xtend® Acre Solution." DuPont Website, *FeXapan™*

*Herbicide Plus Vaporgrip® Technology*, <http://www.dupont.com/products-and-services/crop-protection/soybean-protection/products/fexapan.html> (last visited Dec. 19, 2017).

**J. Continuing Deceptive Advertising**

241. All the while, before and during 2017, Defendants continued their aggressive and misleading advertising campaign.

242. Defendants have done so in person through representatives as well as in written materials and outlets including websites, Facebook, Twitter, Instagram, UTube, Snapchat, Pinterest, and LinkedIn.

243. Monsanto continuously has advertised and represented Xtend seed as high yield. For example, Miriam Paris, Monsanto's U.S. Soybean Marketing Manager, claimed in 2016 that the potential for greater yields, a two and one-half to seven bushel-per-acre yield advantage above RR2 Yield varieties, factored into the company's decision to commercialize Xtend soybeans in 2016.

244. As another example, Monsanto advertised in September 2016 issues of the Delta Farm Press: "raise your yield potential with elite genetics." Delta Farm Press, The Answer to Resistant Weeds Is Here. Monsanto's campaign included slogans like "Xtend Your Yield." Monsanto Website *XtendYourYield 2017 contest promotion*, <http://www.roundupreadyxtend.com/xtendyouryield/Pages/default.aspx>.

245. Independent university testing, however, has found yields with Xtend soybean were actually lower than with RR seed. Lisa Behnken, et al., *U of M SE Minnesota dicamba-tolerant soybean yield results now available* (Oct. 24, 2016) (<http://blog-crop-news.extension.umn.edu/2016/10/u-of-m-se-minnesota-dicamba-tolerant.html>); Shawn P. Conley, *New Traits Don't Automatically Translate to Highest Yield!* (Nov. 14, 2016) (<http://ipcm.wisc.edu/>

blog/2016/11/new-trait-dont-automatically-translate-to-highest-yield/); Emily Unglesbee, *New Trait Data Available* (Nov. 16, 2016), <https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2016/11/16/university-yield-data-emerging-xtend-2>.

246. Defendants also continued playing on concerns over glyphosate resistance and assuring growers that the new dicamba formulations would be low in volatility and could be applied without off-target movement. Again, they promoted the dicamba-based crop system as safe when it was not.

247. BASF continually stressed its theme of need and safety, representing among other things:

- “Our innovative and expansive product portfolio is designed to provide you with crop protection that gives you a business edge.” BASF Webpage, *Grow Smart™ with BASF. Starting with a challenge* (May 10, 2016), <https://web.archive.org/web/20160510015445/http://www.agproducts.bASF.us>.
- “Beyond protecting your crops, we help you get smarter about the risks you face so you can protect your business and bottom line.” *Id.*
- “Advanced formulation reduces loss from volatility.” BASF Engenia Herbicide U.S. Information Brochure, p. 1 (GL-7007A May 2016).
- “Field research demonstrates on-target herbicide application success with low volatility and drift, so the herbicide remains in place.” BASF website, <https://web.archive.org/web/20161230202630/http://agproducts.bASF.us/campaigns/engenia>.
- “Engenia has done great in all of our tests that we use to measure secondary loss parameters . . . there is a significant reduction in any secondary loss profile compared to other dicamba formulations.” Ag Professional, *Engenia specific for dicamba-resistant crops* (April 30, 2014), <https://www.agprofessional.com/article/engenia-specific-dicamba-resistant-crops> (quoting Luke Bozeman, BASF technical market manager).
- “Engenia herbicide that BASF is bringing to the market is the most advanced formulation of dicamba that’s ever been available . . . Engenia is that step change improvement that we’ve developed specifically for the dicamba-tolerant crops – cotton in 2015 and soybeans, hopefully, in 2016.” Forrest Laws, *Engenia to offer ‘most advanced’ formulation of dicamba available* (Aug. 25, 2014), <http://>

[www.deltafarmpress.com/cotton/engenia-offer-most-advanced-formulation-dicamba-available](http://www.deltafarmpress.com/cotton/engenia-offer-most-advanced-formulation-dicamba-available).

- Volatility plays a small role in off-target dicamba incidents. See Pam Smith, *EPA Registers BASF's Engenia, Dicamba-Tolerant Herbicide* (Dec. 23, 2016), <https://agfax.com/2016/12/23/epa-registers-basfs-engenia-dicamba-tolerant-herbicide-dtn/> (quoting Gary Schmitz, BASF technical service regional manager: “I’d estimate 1% of the problems we see are related to volatility . . . Even going back to the early days of my career with Banvel . . . particle drift is the main reason for movement onto sensitive plants.”).
- Engenia offers a 70% - 90% reduction in volatility as compared to older (Clarity) formulations. Pam Smith, *EPA Registers BASF's Engenia, Dicamba-Tolerant Herbicide* (Dec. 23, 2016), <https://agfax.com/2016/12/23/epa-registers-basfs-engenia-dicamba-tolerant-herbicide-dtn/> (quoting Gary Schmitz, BASF Midwest technical service regional manager stating that BASF has a 70% volatility reduction); Gil Gullickson, *Volatility From New Formulations Drives Some Dicamba Damage Say University Weed Scientists* (Dec. 19, 2017), <https://www.agriculture.com/crops/pesticides/volatility-from-new-formulations-drives-some-dicamba-damage-say-university-weed> (quoting Gary Smitz stating: “We brought Engenia in the marketplace as low volatile 90% less volatile than dicamba with DGA salt (Clarity”)).
- “Although the potential for dicamba volatility is low, the Engenia herbicide formulation was developed to *further* minimize loss due to volatilization.” BASF Engenia Herbicide U.S. Information Brochure, p. 3 (GL-7007A May 2016) at 3 (emphasis added). Also touting that “Volatility Concerns” have been “Addressed.” *Id.* at 5.

248. Similarly, Monsanto represented, among other things:

- “With the emergence of glyphosate resistant weeds, the need for a new technology has never been more important. See how dicamba emerged as the right herbicide to fill that role” and XtendiMax “is designed to be the industry’s lowest volatility dicamba formulation. An integral component of the Roundup Ready Xtend Crop System, it is an ideal dicamba option to help manage glyphosate-resistant and tough-to-control weeds.” Monsanto Webpage, *Roundup Ready Xtend Crop System Chemistry* (Feb. 2017), <https://web.archive.org/web/20170210071200/https://www.roundupreadyxtend.com/About/Chemistry/Pages/default.aspx>.
- The Xtend crop system will maximize crop yield potential and allow control of “tough glyphosate resistant weeds.” Press Release, *Farmers to Realize The Benefits Of The Roundup Ready Xtend Crop System in 2017* (Nov. 9, 2016), <http://news.monsanto.com/press-release/products/monsantos-xtenimaxtm-herbicide-vaporgriptm-technology-approved-epa-crop-use>.

- “XtendiMax . . . introduces a step-change reduction in volatility potential compared to dicamba formulations currently on the market today.” Monsanto News Release, *Monsanto’s XtendiMax Herbicide With VaporGrip Technology Approved By EPA For In-Crop Use* (Nov. 9, 2016) (quoting Ryan Rubischko, North America dicamba portfolio lead).
- VaporGrip Technology provides a “[s]tep-change reduction in volatility . . . as compared to other commercially available dicamba formulations” and “[p]rovides applicators greater confidence in on-target application of dicamba.” Monsanto Brochure, “The Next Step in Weed Control For Your Roundup Ready 2 Xtend Soybeans” (2016), [http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&cad=rja&uact=8&ved=0ahUKEwjX183fy5XcAhVq44MKHaciBQMQFghJMAU&url=http%3A%2F%2Fwww.roundup.ca%2F\\_uploads%2Fdocuments%2F16MST8068%2520RoundUp%2520Xtend%2520Brochure\\_V15\\_LR.pdf&usg=AOvVaw2FxvnNhB2p7wDbvqctGBC0](http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&cad=rja&uact=8&ved=0ahUKEwjX183fy5XcAhVq44MKHaciBQMQFghJMAU&url=http%3A%2F%2Fwww.roundup.ca%2F_uploads%2Fdocuments%2F16MST8068%2520RoundUp%2520Xtend%2520Brochure_V15_LR.pdf&usg=AOvVaw2FxvnNhB2p7wDbvqctGBC0).
- Dicamba formulations have been developed over time to help reduce potential volatilization while delivering improved weed control and greater application flexibility. Dicamba “has a decades-long history of effective use in the U.S. . . .” Joint Press Release (St. Louis and Wilmington, DE), *Monsanto and DuPont Sign Dicamba Supply Agreement* (July 7, 2016), <https://www.businesswire.com/news/home/20160707005223/en/Monsanto-DuPont-Sign-Dicamba-Supply-Agreement>.
- XtendiMax has a “significant reduction in volatility potential,” has “[l]ow volatility” and “[w]ill provide applicators confidence in on-target application of dicamba in combination with application requirements for successful on-target applications.” Monsanto XtendiMax Tech Sheet, *Effective Weed Control With XtendiMax™ Herbicide With VaporGrip™ Technology* (Dec. 2, 2016), <https://www.ilfb.org/media/2872071/XtendiMax-Tech-Sheet.pdf>.
- VaporGrip Technology is a “[r]evolutionary [b]reakthrough” which “significantly minimizes dicamba’s volatility potential after spraying – provides growers and applicators confidence in on target application of dicamba” and growers can “[a]pply [w]ith [c]onfidence.” Monsanto Webpage, *About VaporGrip Technology* (Feb. 2017), <https://web.archive.org/web/20170210120320/https://www.Roundupreadyxtend.com/About/vaporgriptechnology/Pages/default.aspx>.
- Based on humidome testing, VaporGrip technology “provides a 90 percent reduction in volatility compared to Clarity, an older dicamba formulation.” Alison MacInnes, *Monsanto Research Chemist, Dicamba-based Herbicide XtendiMax® with VaporGrip® Technology: Years in the Making* (July 13, 2017), <https://monsanto.com/products/product-stewardship/articles/dicamba-xtendimax-vaporgrift-technology/>.

- The new dicamba formulations have a 100-fold reduction in volatility compared to older versions. Indiana Prairie Farmer, *Monsanto officials add their perspective on dicamba issues this season* (July 13, 2017), <http://www.indianaprairiefarmer.com/crop-protection/monsanto-officials-addtheir-perspective-dicamba-issues-season> (citing Monsanto's Robb Fraley).
- VaporGrip technology "significantly minimizes dicamba's volatility potential after spraying – provid[ing] growers and applicators confidence in on-target application of dicamba." Monsanto Webpage, Significant Reduction in Volatility Potential, <https://www.roundupreadyxtend.com/About/vaporgriptechology/Pages/default.aspx> (last visited Dec. 19, 2017).
- XtendiMax "[w]ill provide applicators confidence in on-target application of dicamba in combination with application requirements for successful on-target applications." XtendiMax-Tech-Sheet, <https://www.ilfb.org/media/2872071/XtendiMax-Tech-Sheet.pdf> (Dec. 2016).
- Monsanto's testing was "historic," "comprehensive," and "extensive." See Monsanto News Release, Dicamba and the Roundup Xtend Crop System (Oct. 13, 2017), <https://monsanto.com/company/media/statements/dicamba/>.

249. Similarly, Dupont did and does advertise that FeXapan "employs a new formulation of dicamba that offers a significant reduction in volatility potential than conventional dicamba herbicides, which helps minimize off-target movement when used according to label guidelines." DuPont Press Release, EPA Approval: FeXapan Herbicide Plus VaporGrip Technology (Feb. 16, 2017), <http://www.dupont.com/products-and-services/crop-protection/soybean-protection/press-releases/dicamba-herbicide.html>. It touts FeXapan as "Better Weed Management With Less Worry About Dicamba Volatility." FeXapan Herbicide Plus VaporGrip Technology webpage, <http://www.dupont.com/products-and-services/crop-protection/soybean-protection/products/fexapan.html> (last visited Aug. 23, 2017).

250. Defendants made, and continue to make, such representations and omissions when they knew, and intended, that dicamba would be sprayed extensively and multiple times, in hot summer months, in areas of proximity to susceptible non-resistant plants and crops.

251. Such representations and omissions, including those discussed in paragraphs 148-155, 243-44, 247-48 above were made to the public and potential customers, with knowledge and intent that others rely on them, in order to encourage, influence, and induce sales, and were false and misleading.

252. Such statements and omissions were made by Defendants with knowledge of or reckless disregard for their falsity. Among other things:

- a. Prior use of dicamba for pre-emergent and post-harvest burndown is different than over-the top application during hot summer months and poses risks, including volatility, not present in burndown;
- b. Pre-release testing was insufficient. As weed scientists observed, even successful testing in one location does not accurately determine risk in another. And testing in controlled environments (such as humidome) does not replicate and is not an accurate indicator of volatility under real-world conditions;
- c. The vast majority of Monsanto's testing was not on XtendiMax with VaporGrip Technology;
- d. Even supposed "low" volatility dicamba is still volatile and dangerous to susceptible non-resistant plants and crops;
- e. Following label instructions does not prevent volatilization;
- f. Successful on-target application does not prevent volatilization;
- g. The new formulations do not lower volatility to the extent claimed. According to studies by three universities comparing Banvel (an older version), Engenia, and XtendiMax, the reduction in volatility was only about 33 percent. Lyn Betts, *Measure dicamba risks* (March 14, 2018), <http://www.Cornandsoybean digest.com/weeds/measure-dicamba-risks>;
- h. In real-world conditions, the new formulations are not significantly "lower" in volatility than older versions at all. While they tend to have lower volatility than older versions immediately after application, they continue to volatilize up to 72 hours after application. Independent testing indicates that over time, the amount of volatility between old and new formulations is not meaningfully different. Horstmeier, *Dicamba: Arkansas Plant Board Unanimously Sets Mid-April Limit* (Sept. 22, 2017), <https://>

[agfax.com/2017/09/22/dicamba-arkansas-plant-board-unanimously-sets-mid-april-limit-dtn/](http://agfax.com/2017/09/22/dicamba-arkansas-plant-board-unanimously-sets-mid-april-limit-dtn/);

- i. The Xtend Crop System entails spraying of dicamba during the growing season in multiple applications rather than once pre-emergent or post-harvest, increasing the overall volume of dicamba being loaded into the atmosphere and the risk of harm to non-resistant plants and crops;
- j. Whatever improvements were made to impart “low” volatility do not counteract, but rather are overcome by, scale of spraying in conditions increasing risk of volatilization and damage to susceptible non-resistant plants and crops.

253. Defendants also did not disclose (or adequately educate) that, among other things:

- a. Volatility in the new formulations remains a substantial risk;
- b. Even minute levels of exposure injure susceptible, non-tolerant plants whether through volatilization and/or drift;
- c. Pre-release testing was insufficient and inadequate;
- d. Xtendimax with “VaporGrip Technology” was not independently tested by outside scientists contrary to industry practice;
- e. Following label instruction does not prevent volatilization;
- f. Successful on-target application does not prevent volatilization;
- g. The new formulations are not significantly lower in volatility than older versions when used in real-world conditions;
- h. Dicamba can and does move from target after application and over long distances;
- i. The scale of spraying in given areas increases the risk of harm to non-resistant crops and plants.

254. The product labels were (and are) inadequate to address the dangers associated with the Xtend Crop System. Defendants failed to adequately warn of these dangers by label or otherwise, and failed to adequately train applicators how to avoid injury to non-resistant plants and crops.

**K. Insufficient, Misleading, Deceptive, and Unworkable Labels**

255. The labels for XtendiMax and Engenia (as well as FeXapan) contain false and misleading statements and impressions, omissions, and lack warnings and instructions adequate to protect the environment and prevent injury to non-resistant plants and crops susceptible to dicamba.

256. Directions for use are not stated in terms easily read and understood by the average person likely to use or to supervise use of these herbicides. The directions, when followed, also were not and are not adequate to prevent unreasonable adverse effects on the environment, including non-resistant plants and crops susceptible to dicamba.

257. Among other things, the labels all state that the herbicides should not be used during a temperature inversion. Temperature inversions, however, are difficult to predict. For example, inversions are so difficult to predict that in 2017, Kansas State University expanded weather stations in several communities and posted inversion data on a website, cautioning, however, that this was not “something to look at and say ‘there’s an inversion in place so I shouldn’t spray right now or that there’s not an inversion in place so I can spray.’” Kansas University Extension Service, *New tool is available to farmers to help understand when temperature inversions occur* (Nov. 2, 2017), <http://www.ksre.k-state.edu/news/stories/2017/11/mesonet-temp-inversions.html>.

258. The labels state that the herbicides should not be sprayed when wind speed is under 3 mph or over 10-15 mph. Temperature inversions often occur, however, when wind speed is less than 10 mph.

259. Wind speed also is difficult to predict, particularly wind gusts.

260. In addition, XtendiMax and Engenia labels state that the herbicide should not be sprayed after sunset. The FeXapan label states that temperature inversions can begin to form at

sunset. However, temperature inversions often form, and indeed can be at their most intense, during hours prior to sunset.

261. In addition, dicamba can and does volatilize *after* application for periods exceeding 24 hours and that risk continues regardless of conditions at the time of spraying.

262. Even when sprayed properly, the in-crop dicamba herbicides still can and do volatilize (including in winds of 3 mph or lower).

263. Also, field tests (independently undertaken in 2017) show that volatility of the new dicamba formulations occurred over at least a 2-3 day period after application.

264. With inversions in summertime frequently occurring, the result is volatilized dicamba and fine droplets catching in the inversion layer and moving *en masse* to affect others' fields. This is a chemical effect that occurs even when application instructions are followed.

265. The labels are inadequate, misleading, confusing and even contradictory in other ways as well.

266. For example, the labels state that certain application requirements are to be followed in order to avoid off-target drift and/or will reduce or avoid off-target drift, but do not clearly warn or state that such techniques do not eliminate volatility.

267. The XtendiMax label states that it should not be applied when wind speed exceeds 15 mph but also that it should not be applied if wind speed is 10 - 15 mph if blowing toward "non-target sensitive crops." The labels make a distinction between "sensitive areas" and "non-target susceptible crops." The former contains buffer distances. The latter contains ambiguous statements to the effect that the applicator "not allow contact" of the herbicide with foliage, green stems, exposed non-woody roots of crops and desirable plants. The Xtendimax/FeXapan labels

state that the herbicide should not be applied when the wind is blowing toward “adjacent” commercially grown dicamba sensitive crops but do not define “adjacent”.

268. Moreover, the labels state that the herbicide should not be applied when the wind is blowing in the direction of “dicamba sensitive crops” (XtendiMax/FeXapan) or “specialty” crops (Engenia), but do not clearly identify soybeans as being within that restriction (despite the fact that soybeans are extremely sensitive to dicamba) and otherwise are confusing as to whether the up-wind restriction applies regardless of buffer.

269. In addition, the buffer zone of 110 feet on all the herbicide labels is insufficient for a chemical that volatilizes and moves over distances well in excess of that distance. Field experiments by independent scientists show that damage occurs at least 220 - 300 feet from the application site, and dicamba can move miles in a temperature inversion.

270. Jason Norsworthy commented that “when you have a product that picks up and moves [2-3 miles from the nearest Xtend] . . . I could not tell you what a buffer distance would need to be to prevent off target movement of a product like that. Can’t do it.” Report of the 2017 State of Arkansas Dicamba Task Force Meetings (Sept. 2017), [http://www.aad.arkansas.gov/Websites/aad/files/Content/6126295/Dicamba\\_Task\\_Force\\_Report,\\_sept\\_21\\_2017.pdf](http://www.aad.arkansas.gov/Websites/aad/files/Content/6126295/Dicamba_Task_Force_Report,_sept_21_2017.pdf).

271. The labels also state that the dicamba herbicide is to be sprayed in-crop “up to *and including* beginning bloom (R1 growth stage of soybeans).” Soybeans, however, are hypersensitive to dicamba at the reproductive stage. The most sensitive stages to lose yield from dicamba exposure include R1.

272. As described even by the EPA, the level of precaution necessary to prevent dicamba from moving off target is “extraordinary.” Tom Polansek, *Monsanto, BASF weed killers strain U.S. states with damage complaints* (November 1, 2017), <https://www.reuters.com/article/us-usa>

pesticides-complaints/monsanto-bASF-weed-killers-strain-u-s-states-with-damage-complaints-idUSKBN1D14N0.

273. Among other things, the labels contain onerous requirements for triple-rinse cleaning of equipment. Dicamba residue from a sprayer is not fully eliminated with water. And there are many areas where the herbicide escapes rinsing. Dicamba can even soak into rubber hoses used on most sprayers to a degree that will damage soybeans. Herbicides also can form deposits in the sprayer tank, screens, filters, nozzles, at the end caps or within other portions of the plumbing system. *See* Randy Pryor et al., *Removing Dicamba Residues from Your Sprayer: A Tricky Task* (Feb. 15, 2018), <https://cropwatch.unl.edu/2018/removing-dicamba-residues-your-sprayer-tricky-task>.

274. The instructions also direct the applicator to spray when weeds are no more than four (4) inches tall and only when winds are at least 3 mph, but no more than 15 (or 10) mph, both significantly narrowing the window for timely application, particularly problematic for farmers or commercial applicators with many and/or geographically disbursed acres to spray.

275. For example, accounting for rainfall data, wind speed, and time-of-day restrictions (imposed in Missouri in July 2017), researchers found just five (5) “safe” days to spray in June and not a single June day with 8 consecutive “safe” spraying hours in Missouri during 2017. There were eleven (11) “safe” days in July, but by that time, weeds were too far along to effectively kill, and plants into the R1 growth stage. Emily Unglesbee, *Dicamba Questions, How Often Could Growers Legally Spray Dicamba in 2017?* (Sept. 15, 2017), <https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2017/09/15/often-growers-legally-spray-dicamba>.

276. One of the scientists who did this research, Bill Johnson, stated: “Growers need to understand how very hard it is to use this technology safely . . . We do not have the sprayer or

sprayer operator capabilities in any of these states to spray all the necessary acres within these spray windows.” *Id.*

277. Many of the instructions also are contrary to typical user practices. At an August 8, 2016 Arkansas Pesticide Committee meeting, Boyd Carey from Monsanto acknowledged that “there are things [in the instructions] that are different than typical practices today.” Arkansas Pesticide Committee Meeting (Aug. 8, 2016), <https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf>.

278. The herbicides are to be sprayed no higher than 24 inches above the crops, using nozzles designed to produce coarse/ultra-coarse droplets. There are restrictions on the pattern of the spray and the pounds per square inch of pressure.

279. Course/ultra-course nozzles, producing larger droplet size, generally are understood as detrimental to coverage. The 24-inch boom height is lower than most farmers run their boom. Among other things, unevenness in the field risks damage to the boom. Speed of the sprayer, while affecting spray pressure, also affects the number of acres that can be covered in a given time span.

280. As one person attending the August 8, 2016 Arkansas Pesticide Committee Meeting said, with Monsanto and BASF representatives in attendance: “You’re dealing with real people who have to fight the clock . . . We got guys with eight, 10,000 acres who have four planters, 30-foot long[,] 25 foot long because they have to plant it as quick as they can plant it because it’s limited. They either lose their moisture or it turns to mud. That’s what we’re dealing with. We’re not dealing with theory or drawing board things. That’s why the problem with Dicamba is serious.” Arkansas Pesticide Committee Meeting Minutes (Aug. 8, 2016), <https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf>.

281. These issues were echoed by Larry Steckel:

“Following [the labels] . . . is a Herculean task. Talk about threading the needle – you can’t spray when it’s too windy. You can’t spray under 3 miles per hour. You got to keep the boom down – there are so many things . . . It looks good on paper, but when a farmer or applicator is trying to actually execute that over thousands of acres covering several counties, it’s almost impossible . . . I’m just not sure we can steward this technology as it currently exists.”

Pam Smith, Tennessee Sets Dicamba Rules (July 12, 2017), <https://www.dtvpf.com/agriculture/web/ag/news/crops/article/2017/07/12/states-tack-herbicide-restrictions-2>.

282. Larry Steckel expressed these concerns directly to Monsanto at a conference when he explained that following the label was “[n]early impossible” as, among other things, there is only a “very small window of time” in which to spray, the low 24-inch boom height is “a joke,” and in regard to spraying restrictions based on rain: “who is that accurate of a forecaster?” GM Watch, *Will new restrictions on dicamba spraying save US food crops?* (Dec. 8, 2017), <https://gmwatch.org/en/news/latest-news/18022-will-new-restrictions-on-dicamba-spraying-save-us-food-crops>.

283. Dr. Mike Owen, Iowa State University Professor and Agronomy Department and Extension Weed Specialist stated that the label “is not useable by commercial and private applicators and guarantees that applications will be off-label.” Monsanto Extend Academic Summit (Iowa State Univ.) Slides presented in St. Louis, MO, September 27-29, 2017, *Smokey Alley Farm Partnership et al v. Monsanto Company et al.*, No. 4:17-CV-02031 (E.D. Mo.) (“*Smokey Alley*”) Compl. Ex. 75.

284. Ford Baldwin “said from the start [that] the label couldn’t be followed and allow all the acres to be sprayed in a timely manner.” Baldwin, *Dicamba drift issues move back into*

*spotlight* (June 15, 2017), <http://www.deltafarmpress.com/soybeans/dicamba-drift-issues-move-back-spotlight>.

285. Not only did Defendants recognize the difficulties in conditions and application, but the need for rigorous education and training on the risks of in-crop dicamba and proper manner of application. At the August 8, 2016 Arkansas Pesticide Committee meeting, attended by Monsanto and BASF representatives, for example, Duane Simpson from Monsanto acknowledged that application instructions were “going to take a lot of training, understanding, and respect to do this correctly.” Arkansas Pesticide Committee Meeting Minutes (Aug. 8, 2016), <https://monsanto.com/app/uploads/2017/11/Ex.-T.pdf>.

286. Sufficient effective education and training, however, were not provided, increasing the risk of harm.

287. Moreover, none of the labels provide complete, understandable and accurate information or warnings about the extreme toxicity of the dicamba herbicides, their volatilization properties, or capability of moving long distances and damaging sensitive crops with small levels of exposure.

288. None contain warnings or directions for use that, if complied with, are adequate to protect the environment and prevent injury to susceptible non-dicamba resistant plants and crops.

289. Using dicamba over the top of growing plants in areas with frequent inversions, significant levels of glyphosate-resistant weeds and cultivation of non-Xtend crops, trees and plants, increases the risk of damage to non-target plants and crops. The likelihood of such damage was foreseeable to, and indeed foreseen by, Defendants.

**L. Dicamba Damage in 2017**

290. Farmers planted seed containing the dicamba-resistant trait on at least 25 million acres of soybean and cotton fields in 2017.

291. The spike from one million acres of Xtend soybeans and three million acres of Xtend cotton in 2016 to 25 million or more acres in 2017 is a direct result of the dicamba disaster Defendants conspired to set in motion.

292. Defendants knew that dicamba damage would again occur and would be even more widespread.

293. The dramatic increase in damage during 2017 was a direct result of the proliferation of the dicamba-resistant trait and Xtend Crop System.

294. The number of acres that can be damaged by dicamba is directly related to the amount applied in an area. As Defendants knew, use of dicamba in areas with prevalent glyphosate-resistant weeds would be high, increasing risk to susceptible non-resistant plants and crops. As Defendants also knew, the problem is compounded in areas with high-volume planting of plants and crops susceptible but not resistant to dicamba.

295. In many areas, including those at issue, dicamba was predictably sprayed by so many people that the atmosphere was loaded with dicamba. Damage observed in 2017 included entire hundred-acre fields of soybeans with uniform cupped leaves throughout.

296. In 2017, there were thousands of complaints of dicamba damage. According to the EPA, over 3.6 million acres – about 4 percent of all soybeans planted in the United States – were damaged by dicamba.

297. Nationally, well over 2,000 investigations of dicamba damage were conducted in at least 22 states. States receiving complaints of soybean damage in large number include:

Arkansas (986); Illinois (245); Indiana (128); Iowa (107); Kansas (125); Minnesota (250); Mississippi (78); Missouri (310); Nebraska (93); South Dakota (114); and Tennessee (132). The estimated number of soybean acres injured by dicamba are: Arkansas (900,000 acres); Illinois (600,000 acres); Indiana (55,000 acres); Iowa (150,000 acres); Kansas (100,000 acres); Minnesota (265,000 acres); Mississippi (250,000); Missouri (325,000 acres); Nebraska (50,000 acres); South Dakota (250,000 acres); and Tennessee (400,000 acres).

298. These figures underestimate the number of producers affected as not everyone filed a complaint with their plant board or similar body. Reuben Baris, EPA's acting chief of herbicides, estimated that damage incidents could be five times greater than reported. Eric Lipton, *Crops in 25 States Damaged by Unintended Drift of Weed Killer*, (Nov. 1, 2017), <https://www.nytimes.com/2017/11/01/business/soybeans-pesticide.html>.

299. Other plants including cotton, vegetable crops, fruit and trees also were damaged.

300. Dr. Kevin Bradley stated: "I've been doing this for more than 20 years now and I was around when Roundup Ready was introduced . . . In my opinion, this is nothing like the introduction of any trait or technology as far as the scope and the significance of the injury that's been observed across the U.S." He further stated: "I just don't think we know enough yet to apply [dicamba] safely." Eli Chen, *As harvest season begins, farmers worry how dicamba herbicide could affect next year's crop* (Sept. 19, 2017), <http://news.stlpublicradio.org/post/harvest-season-begins-farmers-worry-how-dicamba-herbicide-could-affect-next-year-s-crop#stream/0>.

301. Symptomology of dicamba damage, including leaf cupping, is unique to dicamba. Cupping throughout a field is a typical pattern indicating volatilization, as opposed to spray drift, which displays a plume of damage that diminishes with distance from the spray source. Other symptoms include strapping, leaf elongation, stunting and/or stem twisting.

302. Scientists and others involved in investigating report damage over significant distances. Jason Norsworthy reported “quite uniform” symptoms 2-3 miles from the nearest Xtend field. Report of the 2017 State of Arkansas Dicamba Task Force Meetings (Sept. 2017) at 139-40, [http://www.aad.arkansas.gov/Websites/aad/files/Content/6126295/Dicamba\\_Task\\_Force\\_Report,\\_sept\\_21\\_2017.pdf](http://www.aad.arkansas.gov/Websites/aad/files/Content/6126295/Dicamba_Task_Force_Report,_sept_21_2017.pdf). Others reported symptoms as far as 5 miles away. *See* Horstmeier, *Dicamba's PTFE Problem* (Aug. 29, 2017), <https://www.dtnpf.com/agriculture/web/ag/perspectives/blogs/editors-notebook/blog-post/2017/08/29/dicambas-ptfe-problem> (“we've talked to many farmers who did everything by the book, paid attention to all label requirements, and still damaged neighbors' crops, trees and lawns not just across the fence, but a mile, 3 miles, even 5 miles away.”).

303. Dr. Bradley explained that the pattern of damage and symptomology points to volatilization: “The majority of fields I've been in are injured from one end to the other with no discernable difference in soybean symptomology . . . This suggests problems with off-site movement through volatility.” Michelle Cummings, *The Dicamba Dilemma*, Momentum, Fall 2017, at 13, <https://view.joomag.com/momentum-fall-2017/0150973001508187562?page=13>.

304. Dr. Norsworthy told a task force of the Arkansas State Plant Board that volatility was a “major cause of the issues” in 2017. Doug Rich, *Changes needed for dicamba formulations* (Sept. 25, 2017), [http://www.hpj.com/crops/changes-needed-for-dicamba-formulations/article\\_61d06219-f796-5fbd-93e1-f789d923c541.html](http://www.hpj.com/crops/changes-needed-for-dicamba-formulations/article_61d06219-f796-5fbd-93e1-f789d923c541.html).

305. Dr. Norsworthy's own tests and by colleagues in Tennessee and Missouri support that belief. Stephen Steed, *No dicamba in '18, Arkansas weed expert urges* (Aug. 18, 2017), <http://m.arkansasonline.com/news/2017/aug/18/no-dicamba-in-18-weed-expert-urges-2017/> (last revisited Aug. 23, 2017).

306. Tennessee's Larry Steckel explained: "This is landscape level redistribution of that herbicide" as opposed to physical drift which often injures in a pattern in the field. According to Steckel: "It's a 200-acre or larger fields covered pretty uniformly. I've never seen anything like it." Pam Smith, *Dicamba Debate Continues* (July 12, 2017), <https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2017/07/12/states-contemplate-herbicide-2>.

307. Other experts such as Dr. Mark Loux from the Department of Horticulture and Crop Science at Ohio State University, and Dr. Bill Johnson of Purdue University, agree that most of the damage was not due to spray drift but volatility:

But particle drift does not result in the relative uniformity of dicamba injury over a large adjacent field that has occurred in some cases. This would be more indicative of movement via dicamba volatilization from leaf or soil surfaces, occurring sometime within several days after application. Vapors then move with prevailing air currents, with potential to move far greater distances than spray particles, upwards of a half mile. Movement of vapors does not require much wind. For example, volatilization of dicamba that occurs under relatively still inversion conditions can result in prolonged suspension and movement of vapors with gentle air currents. In one field we looked at, there appeared to be an initial volatilization event from the adjacent dicamba-treated soybeans, with some subsequent soybean recovery. This appeared to [be] followed by a second round of dicamba exposure and injury to the recovering soybeans several weeks later.

Mark Loux, Bill Johnson, Newsletter at Ohio State University Extension, *It's Beginning To Look A Lot Like – Off-Target Dicamba Movement – Our Favorite Time Of The Year!* (2017), <https://agcrops.osu.edu/newsletter/corn-newsletter/2017-21/it%E2%80%99s-beginning-look-lot-%E2%80%93-target-dicamba-movement-%E2%80%93-our-favorite>.

308. Field experiments conducted by university researchers in the summer of 2017 identified evaporating dicamba as consistent with the symptomology. Among other experiments, dicamba was sprayed into trays of soil at a remote location and then brought to and placed between

rows of soybeans covered with plastic. The dicamba evaporated from the trays and caused damage to surrounding soybeans.

309. Citing research by Jason Norsworthy and Tom Barber in Arkansas, Kevin Bradley in Missouri, and Tom Mueller in Tennessee, weed scientist Ford Baldwin sees no question about whether the new dicamba herbicides volatilize in the field:

Common logic along with our understanding about long distance transport of pesticides in stable air told us the only way we could be getting the landscape effect we are seeing with dicamba is through movement in temperature inversions. Common logic also told us there had to be more than just spray particles being trapped in inversions when the herbicides are restricted to ground application and ultra-coarse nozzles. The results from studies like these now confirms the logic that it is volatiles trapped in the inversions causing the landscape dicamba damage.

As I have stated before[,] dicamba is just doing what dicamba does when it is sprayed in summertime temperatures. Additional application restrictions on the herbicide simply will not fix this problem . . . .

Ford Baldwin, *latest dicamba research and a new task force* (Aug. 17, 2017), <http://www.deltafarmpress.com/weeds/baldwin-latest-dicamba-research-and-new-task-force>.

310. Larry Steckel cited research from Purdue, the University of Arkansas, University of Missouri, University of Georgia, University of Tennessee, and even Monsanto's Texas data submitted to the Arkansas Plant Board, that "clearly showed volatility 54 to 65 hours after application." Monsanto Extend Academic Summit (Iowa State Univ.) Slides presented in St. Louis, MO, September 27-29, 2017 (*Smokey Alley* Compl. Ex. 78).

311. Steve Smith, a former member of Monsanto's dicamba advisory committee, who had long tried to convince Monsanto to change course, said: "Even the best, the most conscientious farmers cannot control where this weed killer will end up." Danny Hakim, *Monsanto's Weed Killer, Dicamba, Divides Farmers* (Sept. 21, 2017), <https://www.nytimes.com/2017/09/21/business/monsanto-dicamba-weed-killer.html>.

312. Mr. Smith was removed from Monsanto’s dicamba advisory committee due to what Monsanto characterized as a “conflict of interest.” *Id.*

313. Damage to susceptible non-dicamba resistant plants and crops from volatilization was foreseeable to, and foreseen by, Defendants.

314. Defendants also knew, and at minimum should have known, that even proper application does not prevent volatilization.

315. To the extent attributable to physical drift, damage to susceptible non-dicamba resistant plants and crops also was foreseeable to, and foreseen by, Defendants.

316. Defendants knew or at minimum should have known that even conscientious applicators would have significant difficulty with the instructions and restrictions for in-crop dicamba.

317. Defendants also knew or at minimum should have known that even a very small amount of dicamba exposure can result in extensive damage to susceptible non-resistant crops, especially soybeans.

318. Dr. Bradley has expressed his opinion that dicamba-based herbicides need to be kept “in the pre-plant, burndown, pre-emergence use pattern,” and should not be used post-emergence. He explained that “the risk is too great for off-target movement to be spraying this for Palmer amaranth [pigweed] and waterhemp in soybeans.” David Bennett, *What’s the latest on dicamba drift in Missouri?* (Sept. 1, 2017), <http://www.deltafarmpress.com/soybeans/what-s-latest-dicamba-drift-missouri>.

319. On August 2, 2017, Monsanto issued “An Open Letter to Our Farmer-Customers.” Calling farmers the “heart and soul of our company,” Monsanto stated that it was taking reports of crop injuries from dicamba “extremely seriously,” and represented its “commit[ment] to

supporting [farmers] at every stage of the season – every year.” *An Open Letter to Our Farmer-Customers* (Aug. 2, 2017), <https://monsanto.com/products/product-stewardship/articles/to-our-farmer-customers/>. Monsanto represented to farmers with dicamba crop injury: “[W]e will stand by you throughout the growing season.” *Id.*

320. Defendants, however, have strenuously and continuously extolled false narratives to mislead consumers into believing that if the herbicides are applied per label, damage will not occur to non-target plants and crops.

321. Monsanto and BASF (as well as DuPont) have gone on the offensive, vigorously denying volatility, which has been independently verified by multiple weed scientists, attacking scientists who question them, and blaming farmers along with everyone else but themselves.

322. Brian Nabor, Monsanto’s U.S. commercial operations lead, for example, stated: “When farmers and applicators follow these instructions, they work,” telling consumers that:

We’re in the early stages, for sure. But to this point, the indications are that volatility of the approved over-the-top products is *not* the major source of the off-target movement.

Brian Naber, *Dicamba Field Investigations: What Monsanto Has Learned So Far* (July 26, 2017), <http://www.greatlakeshybrids.com/agronomy/agronomy/agronomy/2017/07/26/dicamba-field-investigations-what-monsanto-has-learned-so-far> (emphasis original).

323. Monsanto’s Scott Partridge claims that XtendiMax “will not move far, including through volatilization.” Chemical & Engineering News, *Widespread crop damage from dicamba herbicide fuels controversy* (Aug 21, 2017), <http://cen.acs.org/articles/95/i33/Widespread-crop-damage-dicamba-herbicide.html>.

324. BASF also has denied that volatility was any kind of “driving factor” for the 2017 damage. Gill Gullickson, *Volatility Not To Blame For 2017 Off-Target Dicamba Movement, Says*

*BASF* (Nov. 17, 2017), <https://www.agriculture.com/crops/soybeans/volatility-not-to-blame-for-2017-off-target-dicamba-movement-says-bASF>.

325. These statements conflict with uniform findings of independent experts that there *was* volatility in 2017 and it was the major reason for the harm that occurred. As observed by Dr. Steckel, volatility is “[h]ard to address when registrants, despite evidence, will not consider it an issue.” Monsanto Extend Academic Summit (Iowa State Univ.) Slides presented in St. Louis, MO, September 27-29, 2017 (*Smokey Alley* Compl. Ex. 78).

326. Defendants also put the blame on applicators who they say did not follow label instructions. Scott Partridge said: “Every one of those [mistakes] is fixable by education.” Dan Charles, *Monsanto Attacks Scientists After Studies Show Trouble For Weedkiller Dicamba* (Oct. 26, 2017) <https://www.npr.org/sections/thesalt/2017/10/26/559733837/monsanto-and-the-weed-scientists-not-a-love-story>.

327. Education, however, does not fix the dicamba herbicide’s volatility and propensity for off-target movement, especially in climate conditions when it can volatilize off soil and plants to move miles away to susceptible plants. Application methods also do not prevent volatilization. Ford Baldwin explains: “Additional application restrictions . . . simply will not fix this problem.” Ford Baldwin, *latest dicamba research and a new task force* (Aug. 17, 2017), <http://www.deltafarmpress.com/weeds/baldwin-latest-dicamba-research-and-new-task-force>.

328. Dr. Norsworthy agrees: “As a weed scientist, I can’t solve a volatility issue . . . Spraying a product that has a volatile component to it in June, July, and August in the State of Arkansas where we have warm conditions will result in damage.” Doug Rich, *Changes needed for dicamba formulations* (Sept. 25, 2017), [http://www.hpj.com/crops/changes-needed-for-dicamba-formulations/article\\_61d06219-f796-5fbd-93e1-f789d923c541.html](http://www.hpj.com/crops/changes-needed-for-dicamba-formulations/article_61d06219-f796-5fbd-93e1-f789d923c541.html). In his opinion,

“[t]his is a product that is broken.” Tiffany Stecker, *As Dicamba Dust Settles, Scientists and Industry Spar* (Aug. 30, 2017), <https://www.bna.com/dicamba-dust-settles-n73014463916/>.

329. Dr. Rick Cartwright, a plant pathologist, University of Arkansas Extension administrator and Arkansas State Plant Board member, also agrees: “You apply [new dicamba formulations] to soybeans, and 36 hours later the product gets up and goes somewhere else. I don’t know how you educate people to fix that.” Greg D. Horstmeier, *Arkansas Sets Dicamba Limits* (Sept. 22, 2017), <https://www.dtnpf.com/agriculture/web/ag/news/crops/article/2017/09/22/plant-board-limits-herbicide-use-2>.

330. Defendants have denied dicamba damage altogether, pointing to other herbicides, environmental factors, disease, calcium deficiency, and misdiagnosis. These claims have been flatly refuted by weed scientists, who are well acquainted with the unique symptomology of dicamba injury and personally observed thousands of acres of damaged fields.

331. Monsanto and BASF attacked even the independent experts, attempting to discredit and intimidate them. For example, Monsanto executives made repeated calls to Dr. Bradley’s supervisors. Monsanto also told regulators that they should disregard information from Jason Norsworthy because he recommended use of a non-dicamba alternative from a rival company. Bob Scott, weed scientist at the University of Arkansas, reads such tactics “as an attack on all of us, and anybody who dares to [gather] outside data.” Dan Charles, *Monsanto Attacks Scientists After Studies Show Trouble For Weedkiller Dicamba* (Oct. 26, 2017), <https://www.npr.org/sections/thesalt/2017/10/26/559733837/monsanto-and-the-weed-scientists-not-a-love-story>.

#### **M. Regulatory Aftermath of 2017 Dicamba Damage**

332. In October 2017, the EPA announced that, by agreement with Monsanto, BASF and DuPont, it was re-classifying in-crop dicamba as a restricted use herbicide. Among other

things, only certified applicators with special training, and those under their supervision, may purchase and apply in-crop dicamba during the 2018 growing season. Other changes include: additional record-keeping requirements; limiting applications to when maximum wind speeds are below 10 mph (from 15 mph); reducing the times during the day when applications can occur; and additional tank clean-out instruction.

333. This action confirms that the prior labels and instructions were inadequate. As stated by Andrew Thostenson, Pesticide Program Specialist for North Dakota State University Extension Service: “With the new use rules for 2018, it is a fact that reading and following the label was NOT enough in 2017!” Oct. 13, 2017 Tweets from Andrew Thostenson. Certainly, mandatory dicamba-specific training might have been required for 2017 but was not.

334. The Missouri Department of Agriculture, on November 16, 2017, issued a Special Local Need Label for Engenia, limiting application to only certified applicators, requiring special dicamba training (along with verification of training presented to the seller), and prohibiting spraying before 7:30 am and after 5:30 pm. In addition, use of Engenia is prohibited after June 1, 2018 in Dunklin, Pemiscot, New Madrid, Stoddard, Scott, Mississippi, Butler, Ripley, Bollinger and Cape Girardeau counties, and prohibited after July 15, 2018 in all remaining counties. The Department issued the same restrictions for XtendiMax and FeXapan on December 11, 2017.

335. Such changes, however, did not and do not prevent volatility.

336. The revised labels continue to lack necessary and adequate warnings and the directions for use remain inadequate to prevent harm.

337. In September 2017, the Arkansas Plant Board voted to ban applications of dicamba after April 15 in Arkansas.

338. Other states that have imposed additional restrictions include Alabama, Iowa, Minnesota, Mississippi, North Dakota, and Tennessee.

**N. Defensive Purchasing of Dicamba-Resistant Seed**

339. Farmers have purchased and will continue to purchase seed containing the dicamba-resistant trait at higher prices for defensive purposes even if they are not otherwise interested in the base germplasm of the seed or dicamba resistance itself.

340. As one farmer put it: “[Monsanto] knew that people would buy [Xtend] just to protect themselves, . . . You’re pretty well going to have to. It’s a good marketing strategy, I guess. It kind of sucks for us.” Jack Kaskey & Lydia Mulvany, Bloomberg, *Creating a Problem – And a Lucrative Solution* (Sept. 5, 2016), <http://cehn-healthykids.org/wp-content/uploads/2017/07/Bloomberg-business-week-sept-5-112016.pdf>.

341. As summed up by another farmer: “You either get on board or get hurt.” Bryce Gray, St. Louis Post-Dispatch, *‘Get on board or get hurt’: Missouri farmers wrestle with widespread dicamba damage* (Oct. 22, 2017) <http://www.theledger.com/news/20171022/get-on-board-or-get-hurt-missouri-farmers-wrestle-with-widespread-dicamba-damage>.

342. Dr. Bradley, in an audio interview after addressing the Missouri House Agriculture Committee in 2016 stated that “every farmer” he had spoken with who had been injured expressed the same thing - that they would purchase the Xtend technology defensively:

Every farmer I’ve visited with that’s been injured . . . Every single one of them has said the same thing, and that is that next year they will plant the new trait – the dicamba resistant trait – to protect themselves. I hear that terminology over and over and over and it just makes me cringe a little bit to think that farmers won’t have choices. That they aren’t able to plant whatever they want to plant. And that they’ve got to plant a dicamba resistant soybean in the future so they don’t get injured.

Full audio available: [http://cdn.brownfieldagnews.com/wp-content/uploads/2016/09/160831\\_KevinBradley-1.mp3](http://cdn.brownfieldagnews.com/wp-content/uploads/2016/09/160831_KevinBradley-1.mp3).

343. Monsanto was so confident in expansion of the Xtend crop system that by 2015 it already had announced that it would invest almost \$1 billion investment in a dicamba production facility.

344. According to Monsanto's Kerry Preete, this expansion "represents the single largest capital investment in Monsanto's self-manufacturing history." Louise Poirier, *\$975 Million Expansion Underway at Monsanto's Luling Plant* (Feb. 28, 2017), <https://www.enr.com/articles/41538-975-million-expansion-underway-at-monsantos-luling-plant>.

345. According to Monsanto's dicamba plant manager, when construction is completed, in mid-2019, this facility is expected "to supply 50 million pounds of dicamba product, a key component of the Roundup Ready Xtend Crop System." Louise Poirier, *\$975 Million Expansion Underway at Monsanto's Luling Plant* (Feb. 28, 2017), <https://www.enr.com/articles/41538-975-million-expansion-underway-at-monsantos-luling-plant>.

346. Other estimates are that the new plant is targeting 80 - 100 million acres of capacity. Monsanto Whistle Stop Tour "Accelerating the Future of Agriculture" Day 1 (Aug. 17, 2016), [https://monsanto.com/app/uploads/2017/05/whistle\\_stop\\_viii\\_day-1-session\\_materials.pdf](https://monsanto.com/app/uploads/2017/05/whistle_stop_viii_day-1-session_materials.pdf).

347. BASF was so confident of expansion of the Xtend Crop System that it had, by June 2014, announced plans to increase its dicamba production by fifty percent.

348. Notwithstanding the risk, Defendants plan to further expand sales of the dicamba-resistant trait, increasing the level of dicamba spraying, which in turn damages non-resistant damages crops, resulting in further defensive purchases of seed with the dicamba-resistant trait and so on.

349. Monsanto now has agreements not only with DuPont but also with Syngenta to sell dicamba herbicide with VaporGrip Technology.

350. By some estimates, 20% of all U.S. soybean fields and 50% of all U.S. cotton fields were planted with Xtend seed in 2017, just two years after initial launch of Xtend cotton in 2015.

*Latest Monsanto GMO seeds raises worries of monopoly* (Dec. 14, 2017), [www.dailymail.co.uk/wires/afp/article-5178029/Latest-Monsanto-GMO-seeds-raises-worries-monopoly.html](http://www.dailymail.co.uk/wires/afp/article-5178029/Latest-Monsanto-GMO-seeds-raises-worries-monopoly.html).

351. Monsanto plans more than 300 Xtend soybean varieties in 2018 as compared to 120 in 2017.

352. The increase in acres planted with the Xtend technology was and is expected to be astronomical. Monsanto projects that the “Industry’s Largest Seed Technology Platform” with RR2 Xtend would reach 2/3 of all U.S. soybean acres by fiscal year 2019. Monsanto First Quarter 2016 Financial Results (Jan. 6, 2016), [https://monsanto.com/app/uploads/2017/05/2016.01.06\\_mon\\_q1f16\\_financial.pdf](https://monsanto.com/app/uploads/2017/05/2016.01.06_mon_q1f16_financial.pdf). As of mid-2016, it was projecting penetration in soybeans of 15 million acres in 2017, 55 million acres in 2019, with an 80 million target thereafter. Brett Begemann Presentation BMO Farm to Market Conference (May 18, 2019), [https://monsanto.com/app/uploads/2017/05/2016.05.18\\_bmo\\_conference\\_begemann.pdf](https://monsanto.com/app/uploads/2017/05/2016.05.18_bmo_conference_begemann.pdf).

353. By mid-2017, Monsanto projected that soybeans with Xtend technology would reach 20 million acres in the first year of the full system launch. *See* Monsanto Third Quarter FY 2017 Earnings Conference Call Power Point Presentation (June 28, 2017), <https://monsanto.com/app/uploads/2017/06/FINAL-DRAFT-Q3F17-Earnings-Slides-6-26-17/pdf>.

354. The number of soybean acres planted with the dicamba-resistant trait alone rose from approximately 1 million acres in 2016 to more than 20 million acres in 2017. Monsanto projects that this will double to more than 40 million acres in 2018, and 55 million acres in 2019.

Monsanto is targeting more than 80 million acres in the U.S. Monsanto Fourth-Quarter FY2017 Presentation “Fiscal Year 2017 Results and Outlook” (Oct. 4, 2017), [https://monsanto.com/app/uploads/2017/10/MonsantoCo.\\_Q4F17\\_Earnings\\_Presentation\\_2017.10.04.pdf](https://monsanto.com/app/uploads/2017/10/MonsantoCo._Q4F17_Earnings_Presentation_2017.10.04.pdf).

355. In 2017, the USDA reported a “record high” of 89.5 million acres of soybeans planted in the United States. Even at that high level, Monsanto is projecting near 100% penetration of the entire United States soybean market.

356. BASF benefits from all this increase from, at minimum, sales of Engenia, older versions of dicamba, and possibly other in-crop formulations as well.

357. In addition to soybeans and cotton, Monsanto has petitioned the USDA for deregulation of a genetically engineered dicamba-resistant corn.

358. The more crops planted with dicamba-resistant seed and the more dicamba sprayed after emergence of susceptible non-resistant crops, the more damage there will be and the more farmers will be forced to buy the seed to protect themselves at higher cost.

359. As of June, university weed scientists already have estimated approximately 1.1 million acres of soybeans with dicamba injury in 2018.

360. Kevin Bradley has observed extensive injury to other plants as well. He is “convinced that the adoption of the Xtend trait in cotton and soybean is as high [in Missouri] as anywhere in the country. Many growers in this area have adopted the Xtend trait so they don’t experience dicamba injury on their soybean crop for a third season in a row.” Adoption of the Xtend trait means that fields planted with that trait are protected, but “just as in the past two seasons, there are still fields of non-Xtend soybean in this area showing injury from one end to the other.” Kevin Bradley, Dicamba Injured Crops and Plants Becoming More Evident: June 15th Update (June 21, 2018), <https://ipm.missouri.edu/IPCM/2018/6/dicambaInjuryUpdate/>.

361. Farmers must either buy seed containing the dicamba-resistant trait or run the risk that their crops will be damaged by dicamba.

362. Defendants' attempt to force everyone into a dicamba-based system is not reasonable or in the public interest.

363. Even this course is unavailable to farmers who grow crops for which there is no dicamba-tolerant seed.

364. While dicamba is effective against weeds, it is highly dangerous to non-resistant plants and crops. And farmers should not be forced to purchase dicamba-resistant seed at higher cost for defensive purposes. Dicamba is dangerous not only to non-tolerant crops like soybeans, but fruits, vegetables, trees, and flowers that feed honeybees. Moreover, dicamba use is likely to produce the same tolerance as glyphosate. Researchers have shown that pigweed can develop dicamba resistance within as few as three years. Caitlin Dewey, *This miracle weed killer was supposed to save farms. Instead, it's devastating them* (Aug. 29, 2017), [https://www.washingtonpost.com/business/economy/this-miracle-weed-killer-was-supposed-to-save-farms-instead-its-devastating-them/2017/08/29/33a21a56-88e3-11e7-961d-2f373b3977ee\\_story.html?utm\\_term=.5435b9e33dd3](https://www.washingtonpost.com/business/economy/this-miracle-weed-killer-was-supposed-to-save-farms-instead-its-devastating-them/2017/08/29/33a21a56-88e3-11e7-961d-2f373b3977ee_story.html?utm_term=.5435b9e33dd3).

365. Persons growing plants and crops susceptible and not resistant to dicamba, particularly soybeans, are those most foreseeably injured by the Xtend Crop System.

366. Plaintiffs and other Class members grew soybeans, highly susceptible to and not resistant to dicamba, which exhibited physical symptoms of dicamba damage and suffered injury not only to their possessory and other interests but yield loss as a result of the dicamba-resistant seed and the Xtend Crop System.

### CLASS ACTION ALLEGATIONS

367. Plaintiffs bring this action pursuant to Rules 23(a), 23(b)(1), and 23(b)(3) of the Federal Rules of Civil Procedure (“Rules” or, individually, “Rule”), on behalf of themselves and a number of classes (each a “Class,” and collectively, “Classes”), consisting of all persons and entities, either in Plaintiffs’ respective states or, collectively, in the Nationwide Soybean Producers Class as defined below.

368. The Nationwide Soybean Producers Class consists of all persons and entities in the United States who in 2017, and in addition as to Missouri who in 2016, were producers (as reflected in FSA Form 578) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting). Excluded from the Nationwide Class are the Court and its officers, employees, and relatives; Defendants and their subsidiaries, officers, directors, employees, contractors, and agents; and governmental entities. Also excluded are persons who in 2017, and as to Missouri in 2016, had in that year dicamba injury and also sprayed dicamba over the top of crops grown from seed containing the dicamba-resistant trait.

369. Plaintiffs, in Count I below, assert claims against Defendants on behalf of themselves and the Nationwide Soybean Producers Class as well as each State Producers Class, for Defendants’ violations of the Lanham Act.

370. In addition or alternatively, Plaintiffs, in Counts II - XCIII below assert state-law claims against Defendants, individually and on behalf of the statewide Soybean Producer Class corresponding to the state in which that Plaintiff sustained injury to non-resistant soybeans:

a. The Arkansas Soybean Producers Class: persons and entities who in 2017 were Arkansas producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or

without further symptoms of strapping, leaf elongation, stunting and/or stem twisting).

b. The Illinois Soybean Producers Class: persons and entities who in 2017 were Illinois producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting).

c. The Kansas Soybean Producers Class: persons and entities who in 2017 were Kansas producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting).

d. The Mississippi Soybean Producers Class: persons and entities who in 2017 were Mississippi producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting).

e. The 2016 Missouri Soybean Producers Class: persons and entities who in 2016 were Missouri producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting).

f. The 2017 Missouri Soybean Producers Class: persons and entities residing who, in 2017 were Missouri producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting);

g. The South Dakota Soybean Producers Class: persons and entities who in 2017 were South Dakota producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting).

h. The Tennessee Soybean Producers Class: persons and entities who in 2017 were Tennessee producers (as defined above) of soybeans not resistant to dicamba which exhibited physical symptoms of dicamba injury (leaf cupping with or without further symptoms of strapping, leaf elongation, stunting and/or stem twisting).

371. Excluded from these state Classes are the Court and its officers, employees, and relatives; Defendants and their subsidiaries, officers, directors, employees, contractors, and agents; and governmental entities. Also excluded are persons who in 2017, and as to Missouri in 2016, had in that year dicamba injury and also sprayed dicamba over the top of crops grown from seed containing the dicamba-resistant trait

372. The proposed Classes meet all requirements for class certification. The Nationwide Class, and each State Class satisfies the numerosity standards. Nationally, there were over 2,000 complaints of dicamba damage in 2017 including numerous complaints and acres of dicamba-damaged soybeans in each state in which Plaintiffs and respective state Class members grew soybeans as alleged above in paragraph 297. In Missouri, there also were over 144 complaints of dicamba damage in 2016 involving approximately 100,000 acres of soybeans. All these numbers are understated as not every producer with damage reported it. As a result, joinder of all Class Members in a single action is impracticable. Class Members may be informed of the pendency of this Class Action by mail, published and/or broadcast notice.

373. The “commonality” requirement of Rule 23(a)(2) is satisfied because there are questions of law and fact common to each of the respective Plaintiffs and the other members of each Class they respectively seek to represent. Common questions of law and fact include but are not limited to:

- a) Whether Defendants are liable to Plaintiffs under one or more theory alleged in this Complaint;
- b) Whether Defendants acted as partners, agents, joint venturers, joint enterprise or similar relationship;
- c) Whether Defendants violated the Lanham Act causing injury to Plaintiffs and members of the Nationwide Soybean Producers Class;
- d) Whether Defendants carried on abnormally dangerous activity;

- e) Whether injury to Plaintiffs was foreseeable;
- f) Whether Defendants owed a duty of care to Plaintiffs;
- g) Whether Defendants breached a duty of care and were negligent in one or more respects;
- h) Whether Defendants' conduct caused harm to Plaintiffs;
- i) Whether Defendants designed, developed, sold, distributed, and/or supplied a product in defective condition unreasonably dangerous;
- j) Whether Defendants failed to provide adequate warning of the dangers of the dicamba-resistant seed and Xtend Crop System;
- k) Whether Defendants breached express or implied warranties;
- l) Whether invasion of dicamba onto property possessed by Plaintiffs and class members constitutes a trespass for which Defendants are liable;
- m) Whether invasion of dicamba constitutes a nuisance for which Defendants are liable;
- n) Whether Defendants engaged in a civil conspiracy;
- o) Whether Monsanto and/or BASF acted in a manner that warrants imposition of punitive damages.

374. Such questions predominate over any questions affecting only individual persons, and a class action is superior with respect to considerations of consistency, economy, efficiency, fairness and equity, to other available methods for the fair and efficient adjudication of this controversy.

375. Plaintiffs' claims are typical of the claims of all other members of each of the respective Classes that they seek to represent, as described above, because they arise from the same course of conduct by Defendants and are based on the same legal theories as do the claims of all other members of each of the respective Classes. Moreover, Plaintiffs seek the same forms of relief for themselves as they do on behalf of absent Class members. Accordingly, Plaintiffs have satisfied

the “typicality” requirements of Rule 23(a)(3) with respect to each Class they respectively seek to represent.

376. Because their claims are typical of the respective Classes they seek to represent, Plaintiffs have every incentive to pursue those claims vigorously. Plaintiffs have no conflicts with, or interests antagonistic to, other members of the Classes they respectively seek to represent relating to the claims set forth herein. Also, Plaintiffs’ commitment to the vigorous prosecution of this action is reflected in their retention of competent counsel experienced in litigation of this nature to represent them and the other members of each of the Classes. Plaintiffs’ counsel will fairly and adequately represent the interests of each of the proposed Classes, and: (a) have identified and thoroughly investigated the claims set forth herein; (b) are highly experienced in the management and litigation of class actions and complex litigation; (c) have extensive knowledge of the applicable law; and (d) possess the resources to commit to the vigorous prosecution of this action on behalf of the proposed Classes. Accordingly, Plaintiffs satisfy the adequacy of representation requirements of Rule 23(a)(4) with respect to each of the proposed Classes.

377. In addition, this action meets the requirements of Rule 23(b)(1). This case raises questions about, among other things, ultrahazardous activity, Defendants’ duty of care, negligence, and strict liability, which require class-wide adjudication to prevent risk of inconsistent rulings and incompatible standards of conduct for Defendants. Moreover, absent a representative class action, many members of the proposed Classes would continue to suffer the harms described herein, for which they would have no remedy. Even if separate actions could be brought by individual producers, the resulting multiplicity of lawsuits would cause undue hardship and expense for both the Court and the litigants, as well as create a risk of inconsistent rulings and adjudications that might be dispositive of the interests of similarly situated producers, substantially

impeding their ability to protect their interests, while establishing incompatible standards of conduct for Defendants.

378. This action additionally meets the requirements of Rule 23(b)(3). Common questions of law and fact, including those enumerated above, exist as to the claims of all members of each of the respective Classes and predominate over questions affecting only individual Class members of each such Class, and a class action is the superior method for the fair and efficient adjudication of this controversy. Class treatment will permit large numbers of similarly-situated persons to prosecute their respective class claims in a single forum simultaneously, efficiently, and without the unnecessary duplication of evidence, effort, and expense that numerous individual actions would produce. Furthermore, while damages to members of each of the proposed Classes are substantial in the aggregate, the damages to any individual member of the proposed Classes may be insufficient to justify individually controlling the prosecution of separate actions against Defendants.

379. Maintenance of this action as a class action is a fair and efficient method for adjudication. It would be impracticable and undesirable for each member of the Class to bring a separate action. In addition, the maintenance of separate actions would place a substantial and unnecessary burden on the courts and could result in inconsistent adjudications, while a single class action can determine, with judicial economy, the rights of all members of the Class.

380. This case is manageable as a class action, and a class trial will be manageable. Notice may be provided to members of the respective Classes by first-class mail and through alternative means of publication and the Internet. Moreover, the Nationwide Soybean Producers Class members' claims will be decided under federal substantive law, and the State Classes' claims will likewise each be decided under the substantive law of only one state, *i.e.*, that of the respective

state of each of those Classes. Thus, the Court will not have to grapple with the application of multiple jurisdictions' law to the members of any single Class.

381. To the extent one or more of the Plaintiffs are not deemed adequate Class Representatives or otherwise cannot fulfill their duties, or there is an absence of an adequate Class Representative for any other reason, Plaintiffs reserve the right to seek to substitute or add Class Representatives.

382. To the extent not all issues or claims, including damages, can be resolved on a class-wide basis, Plaintiffs invoke Rule 23(c)(4) and reserve the right to seek certification of narrower and/or re-defined Classes and/or to seek certification of a liability class or certification of certain issues common to the class. To the extent necessary for Rule 23(c)(4) certification, Rules 23(a) and 23(b) are satisfied. And resolution of particular common issues would materially advance the disposition of the litigation as a whole. Plaintiffs further reserve the right to seek to combine one or more of the Statewide Classes as appropriate, including to the extent the laws of any two or more states do not have materially conflicting laws relevant to the claims that they may be combined into a single Class.

**CLAIMS FOR RELIEF**  
**COUNT I – LANHAM ACT**  
**(on behalf of all Plaintiffs and the Nationwide Class)**

383. Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

384. The Lanham Act, 15 U.S.C. § 1125(a) provides in pertinent part:

(1) Any person who, on or in connection with any goods or services, or any container for goods, uses in commerce any word, term, name, symbol, or device, or any combination thereof, or any false designation of origin, false or misleading description of fact, or false or misleading representation of fact, which –

(A) is likely to cause confusion, or to cause mistake, or to deceive as to the affiliation, connection, or association of such person with another person, or as to

the origin, sponsorship, or approval of his or her goods, services, or commercial activities by another person, or

(B) in commercial advertising or promotion, misrepresents the nature, characteristics, qualities, or geographic origin of his or her or another person's goods, services, or commercial activities,

Shall be liable in a civil action by any person who believes that he or she is or is likely to be damaged by such act.

385. Defendants' products are sold in commerce and their statements, representations and omissions were made in commerce in connection with goods and/or services.

386. Defendants made numerous statements and commentary to the press, public, potential customers and applicators on their websites, on the internet, during investor conference calls, on their product labels and in marketing and advertising materials that were false or misleading descriptions or representations of fact likely to cause and/or that did cause confusion and mistake or to deceive in respect to the nature, characteristics, and qualities of the Xtend Crop System and its components.

387. Such statements and representations included that the Xtend Crop System could be safely employed utilizing over-the-top application of dicamba herbicides on dicamba-resistant crops and would not lead to volatilization and/or drift onto susceptible non-dicamba resistant plants and crops as well as statements, representations and omissions described more fully in paragraphs 148-155, 243-44, 247-48, and 252-53 above.

388. Such statements and representations (including those containing omissions) were widely distributed which is at least sufficient to constitute promotion and were material.

389. Such statements and representations (including those containing omissions) were made in commercial advertising or promotion for the Xtend Crop System, seed containing the dicamba-resistant trait, and dicamba herbicides.

390. Such statements and representations (including those containing omissions) were and are materially false and are, and continue to be, likely to cause confusion and mistake as to the nature, characteristics and qualities of the Xtend Crop System and its components, as further described in paragraphs 148-155, 243-44, 247-48, and 252-53 above, including the nature and impact of volatilization and drift, the nature and impact of atmospheric loading, high use of dicamba herbicide, and temperature inversions on susceptible non-resistant plants and crops and the ability to prevent/minimize damage thereto.

391. Such statements (including those containing omissions) were likely to and did influence purchasing decisions by farmers who purchased seed containing the dicamba-resistant trait and also purchased and used dicamba herbicide over the top of crops grown from that seed.

392. Defendants used false descriptions and representations in interstate commerce in violation of § 43(a) of the Lanham Act.

393. Defendants had economic motivation for making such statements as they were each incentivized to sell dicamba-resistant technology, dicamba-resistant seed, and dicamba herbicides.

394. Plaintiffs and the Nationwide Soybean Producers Class were and continue to be damaged as a result of Defendants' material misrepresentations.

395. Defendants' acts caused damage to these Plaintiffs and other members of the Class.

396. Defendants' representations, statements and commentary as more fully set forth herein were made with knowledge or reckless disregard of their falsity and the resulting risk of damage to Plaintiffs and others.

397. Defendant used false descriptions and representations in interstate commerce in violation of § 43(a) of the Lanham Act and Plaintiffs, individually and on behalf of the other Class

members, are entitled to recover damages, the costs of this action, and, because this case is exceptional, reasonable attorneys' fees.

**COUNT II - STRICT LIABILITY (ULTRAHAZARDOUS)  
(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Count I, Arkansas Plaintiffs assert this Count II for strict liability, ultrahazardous activity.

398. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

399. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

400. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

401. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it. BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

402. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

403. Both Defendants actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in Arkansas.

404. Both Defendants heavily marketed and promoted the Xtend Crop System as safe when it was not.

405. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

406. The risk of harm cannot be eliminated with exercise of utmost care.

407. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

408. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

409. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

410. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

411. Temperature inversions occur frequently in Arkansas. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

412. Defendants’ design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in Arkansas given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in Arkansas.

413. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

414. A crop system entailing application of dicamba over the top of crops grown from dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

415. As a result of Defendants' activities, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

416. Each Defendant knew or ought to have known that its conduct would naturally and probably result in injury and damage to others, including the Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class. Both carried on and continued such conduct in reckless disregard of the consequences. Punitive damages are thus warranted.

**COUNT III – GENERAL NEGLIGENCE**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Count I, but in the alternative to Count II, Arkansas Plaintiffs assert this Count III for general negligence.

417. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

418. Producers with non-resistant plants and crops susceptible to dicamba, including soybeans, are the most likely to be harmed by Defendants' irresponsible conduct.

419. Monsanto and BASF knew, but at minimum should have known, that development, commercialization, promotion, sale and licensing of the dicamba-resistant trait would result in significant use of dicamba herbicide over the top of crops grown from seed containing that trait. The trait and seed were developed and sold for this very purpose, which both Monsanto and BASF intended and anticipated.

420. BASF also developed, manufactured, marketed, and sold a new supposedly “low” volatility formulation of dicamba, Engenia, specifically for use with seed containing the dicamba-resistant trait. Engenia was the only dicamba herbicide registered for in-crop use in Arkansas in 2017.

421. BASF further increased sales of older versions of dicamba herbicides not registered for in-crop use.

422. As Monsanto and BASF knew, even supposed “low-volatility” dicamba herbicides are still volatile, and still a high risk of moving off target and damaging susceptible non-resistant plants and crops.

423. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

424. To the extent damage resulted from drift and otherwise, it was foreseeable, and foreseen, by Monsanto and BASF that applicators could not or would not adhere to label instructions.

425. To the extent some applicators used older versions of dicamba, it was foreseeable, and foreseen, by Monsanto and BASF that they would do so.

426. Monsanto and BASF knew, but at minimum should have known, that conditions in areas, including Arkansas, such as temperature inversions, predictably high dicamba usage, and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or drift.

427. It was foreseeable, and foreseen, that in-crop use of dicamba would result in damage to susceptible, non-resistant plants and crops, especially soybeans.

428. It was foreseeable, and foreseen, that injury to producers of susceptible non-resistant crops such as Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class would occur.

429. Monsanto and BASF have a duty of reasonable care to avoid foreseeable harm and certainly a duty to not create, or continue, foreseeable risk of harm to Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class.

430. That duty is to exercise reasonable care and caution commensurate with the dangers to be reasonably anticipated under the circumstances.

431. Rather than exercise even ordinary care, Monsanto and BASF did just the opposite.

432. Monsanto widely sold, licensed and disseminated a dicamba-resistant trait specifically for use with dicamba applied during summer months over the top of growing plants to the foreseeable injury of susceptible non-dicamba resistant plants and crops, especially soybeans.

433. As partner, joint venture or joint enterprise with Monsanto, BASF is jointly liable.

434. In addition or in the alternative, BASF entered into one or more agreements with Monsanto to jointly design, develop, and commercialize that trait and seed containing it. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the dicamba-resistant trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

435. Monsanto's North American Crop Protection Systems Lead, Ty Witten, stated that while Monsanto's in-crop dicamba herbicide was not registered for use in Arkansas for 2017, "our seed product is absolutely involved. We are aligned with BASF on the majority of things . . ."

Jackie Pucci, *Dicamba Technology Here to Stay, Says Monsanto Crop Protection Lead* (June 29,

2017), <http://www.croplife.com/crop-inputs/dicamba-technology-here-to-stay-says-monsanto-crop-protection-lead/>.

436. Monsanto and BASF both designed, developed and accelerated the Xtend Crop System, made up of seed containing the dicamba-resistant trait and dicamba herbicide.

437. BASF designed, manufactured and sold a dicamba herbicide as part of the Xtend Crop System, which it intended and knew would be used over the top of soybean and cotton grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System, to the foreseeable injury of non-resistant plants and crops.

438. Defendants also failed to adequately test the system with new formulations of dicamba, including Engenia.

439. Monsanto and BASF also expressly undertook to, but failed, to provide adequate education, training, and instruction to users of the Xtend Crop System which they did or should have recognized as minimally necessary for the protection of persons including producers of susceptible non-dicamba resistant plants and crops, including soybeans.

440. Monsanto and BASF both failed to exercise reasonable care in this undertaking, which increased the risk of harm to Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class.

441. Defendants also aggressively and misleadingly promoted the Xtend Crop System as safe when it was not, knowing and intending that such promotion would increase in-crop use of dicamba and correspondingly, the risk of harm.

442. Monsanto also considered but refused to take action to prevent those who sprayed dicamba unregistered for in-crop use in 2015 and 2016 from doing so again, or refuse to sell dicamba-resistant seed to such persons, and did so for its own financial gain.

443. Defendants designed, developed, accelerated, sold, promoted and disseminated the dicamba-resistant trait specifically for use with inadequately tested, volatile and drift-prone herbicide seriously dangerous to susceptible non-resistant crops, and in a manner most likely to create and increase risk and cause damage, including but not limited to aggressive and misleading marketing, licensing, and unlimited release of a much-touted crop system into areas such as Arkansas with significant glyphosate-resistant weeds, foreseeably heavy use of dicamba under circumstances including common occurrence of inversions, inadequately trained and uncertified applicators, inadequate warnings, and heavy planting of highly susceptible crops such as soybeans, creating high probability of off-target movement and damage.

444. Defendants breached their duty of care.

445. As a direct and proximate result, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

446. Monsanto and BASF each knew or ought to have known, in light of the surrounding circumstances, that its conduct would naturally or probably result in injury, and continued such conduct in reckless disregard of the consequences. Punitive damages thus are warranted.

**COUNT IV - STRICT LIABILITY (DESIGN DEFECT)**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I and III, but in the alternative to Count II, Arkansas Plaintiffs assert this Count IV for strict liability, design defect.

447. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-446 as though fully alleged herein.

448. Pursuant to Ark. Code Ann. § 16-116-101, the supplier of a product is liable for harm to another person or his property if: (1) the supplier is engaged in the business of

manufacturing, selling or otherwise distributing a product; (2) in a defective condition that rendered it unreasonably dangerous; and (3) was the proximate cause of harm.

449. A manufacturer includes “the designer, fabricator, producer, compounder, processor, or assembler of any product or its component parts.” Ark. Code Ann. § 16-116-202(3).

450. A product is in defective condition if unsafe for reasonably foreseeable use and consumption. Ark. Code Ann. § 16-116-102(2).

451. A product is unreasonably dangerous if dangerous to an extent beyond that which would be contemplated by the ordinary and reasonable buyer, consumer, or user who acquires or uses the product. Ark. Code Ann. § 16-116-202(7)(A).

452. Monsanto and BASF both are in the business of manufacturing, selling and otherwise distributing agricultural products, including the dicamba-resistant trait, seed containing that trait, and dicamba herbicides.

453. Monsanto and BASF have a partnership, joint venture and joint enterprise for the design, development and commercialization of the Xtend Crop System consisting of the dicamba-resistant trait, seed containing it, and dicamba herbicide.

454. The dicamba-resistant trait was designed, sold, and distributed specifically for intended use of dicamba herbicide sprayed during summer months over the top of crops grown from seed containing that trait. Correspondingly, dicamba herbicide for in-crop use was designed, sold and distributed specifically for crops grown from seed containing the dicamba-resistant trait.

455. The dicamba-resistant trait, and seed containing that trait, was manufactured, sold and licensed for sale by Monsanto.

456. As partner, joint venture or joint enterprise with Monsanto, BASF is jointly liable.

457. In addition or in the alternative, BASF itself sold or Monsanto commercialized, manufactured, sold, licensed and distributed the trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

458. BASF itself manufactured and sold Engenia, the only dicamba herbicide registered for in-crop use in Arkansas in 2017, as well as older versions of dicamba herbicides.

459. Monsanto and BASF both are engaged in manufacturing, assembling, selling and otherwise distributing, the Xtend Crop System, entailing seed containing the dicamba-resistant trait and in-crop use of dicamba herbicide as an integrated crop system unreasonably dangerous for the reasons herein described.

460. The Xtend Crop System was and is unsafe for the anticipated, foreseeable use by Xtend Crop System users of spraying dicamba herbicide over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably in the vicinity of susceptible non-dicamba resistant plants and crops, including soybeans.

461. All dicamba currently on the market, including Engenia, is volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

462. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

463. To the extent damage resulted from drift and otherwise, it was foreseeable and indeed foreseen that applicators could not or would not adhere to label instructions.

464. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

465. The dicamba-resistant trait, seed containing that trait, and Xtend Crop System were used as reasonably anticipated, and as designed and so used, were and are in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was foreseeable.

466. The seed and Xtend Crop System were and are unreasonably dangerous when put to ordinary and intended use, reasonably foreseeable and actually foreseen by Monsanto and BASF as highly likely to result in injury, and to an extent beyond that which would be contemplated by an ordinary and reasonable buyer, consumer, or user with ordinary knowledge as to their characteristics, propensities, risks, dangers and uses.

467. Ordinary consumers and users of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans. Indeed, Monsanto and BASF both represented the Xtend Crop System was safe and concealed the risks.

468. Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen when used for the purpose for which intended or as foreseeably may be used.

469. As a proximate result of the defective and dangerous condition of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

470. Monsanto and BASF each knew or ought to have known, in light of the surrounding circumstances, that its conduct would naturally or probably result in injury, and continued such conduct in reckless disregard of the consequences. Punitive damages thus are warranted.

**COUNT V - STRICT LIABILITY (FAILURE TO WARN)**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I, and III-IV, but in the alternative to Count II, Arkansas Plaintiffs assert this Count V for strict liability, failure to warn.

471. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-470 as though fully alleged herein.

472. As alleged, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in anticipated and foreseeable manner were and are unreasonably dangerous and defective at the time of sale.

473. Defendants failed to warn or to provide adequate warning of such defective condition, of which they knew or minimally should have known.

474. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

475. A product is defective under Ark Code Ann. § 16-116-101 if it lacks adequate warning of risks or hazards, and/or adequate instruction for safe use rendering the product unreasonably dangerous beyond that which would be contemplated by the ordinary buyer.

476. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of the Xtend Crop System and its components.

477. As alleged, ordinary users and consumers of the Xtend Crop System were unaware of such dangers, which by contrast, were foreseeable and foreseen by Defendants.

478. Monsanto and BASF failed to provide adequate warning and instruction by label or otherwise.

479. Moreover, the labels were false, misleading and failed to contain warnings or instructions adequate to protect or prevent harm to the environment, including susceptible non-resistant plants and crops, including soybeans.

480. Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use.

481. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT VI – NEGLIGENT DESIGN**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I, and III-V, but in the alternative to Count II, Arkansas Plaintiffs assert this Count VI for negligent design.

482. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-481 as though fully alleged herein.

483. Monsanto and BASF have a duty to use ordinary care in designing and selecting materials for their products in order to protect those in the area of their use from unreasonable risk of harm while the product is being used for its intended purpose or as should reasonably be expected.

484. The Xtend Crop System was intended and expected to be used with dicamba-resistant seed and dicamba herbicide sprayed over the top of crops grown from that seed in summer months and foreseeably, in the vicinity of susceptible non-dicamba resistant plants and crops, creating high risk of serious harm to those non-resistant plants and crops, including soybeans.

485. As Monsanto and BASF knew or at minimum should have known, even supposed “low-volatility” dicamba herbicides are still volatile, prone to drift, and at high risk of moving off target and damaging susceptible non-dicamba resistant plants and crops.

486. Defendants failed to use ordinary care in design and selection of materials for the Xtend Crop System and its components, which are unreasonably dangerous and defective.

487. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

488. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions

489. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

490. As a direct and proximate result of Defendants’ failure to use reasonable care in design of the dicamba-resistant trait, seed and/or Xtend Crop System, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

491. Monsanto and BASF each knew or ought to have known, in light of the surrounding circumstances, that its conduct would naturally or probably result in injury, and continued such conduct in reckless disregard of the consequences. Punitive damages thus are warranted.

**COUNT VII - NEGLIGENT FAILURE TO WARN**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I and III-VI, but in the alternative to Count II, Arkansas Plaintiffs assert this Count VII for negligent failure to warn.

492. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-491 as though fully alleged herein.

493. Monsanto and BASF have a duty to give reasonable and adequate warning of dangers inherent or reasonably foreseeable in the use of their products in the manner intended or as should reasonably be foreseen.

494. The dangers of the Xtend Crop System and its components were foreseeable, and foreseen, by Monsanto and BASF.

495. The dangers to non-resistant plants and crops from the intended and foreseeable use of dicamba-resistant seed and the Xtend Crop System were inherent or foreseeable as well as foreseen by Monsanto and BASF.

496. Defendants failed to exercise reasonable care to warn and adequately warn of the dangers. To the contrary, both misrepresented and concealed the dangers.

497. Defendants breached their duty and as a direct and proximate result, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

498. Monsanto and BASF each knew or ought to have known, in light of the surrounding circumstances, that its conduct would naturally or probably result in injury, and continued such conduct in reckless disregard of the consequences. Punitive damages thus are warranted.

**COUNT VIII - NEGLIGENT TRAINING**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I and III-VII, but in the alternative to Count II, Arkansas Plaintiffs assert this Count VIII for negligent training.

499. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-498 as though fully alleged herein.

500. Monsanto and BASF have a duty to give reasonable and adequate instruction and training with respect to the conditions and methods of safe use when danger in use of their product is reasonably foreseeable.

501. The dangers of the Xtend Crop System and its components were foreseeable and foreseen by Monsanto and BASF.

502. Monsanto and BASF failed to provide reasonable and adequate training and instruction to their employees, agents, licensees or distributors or to users of the Xtend Crop System.

503. Adequate instruction was not provided by education or training, and none of the labels contain instruction for use that would, if followed, prevent harm to the environment including susceptible, non-resistant plants and crops including soybeans.

504. In addition to duty imposed by law, Monsanto and BASF each specifically undertook to render services to growers who used the Xtend Crop System, including the provision of stewardship tools, education and training, which both recognized to be necessary for minimal protection of third persons or their things, including Plaintiffs and members of the Arkansas State Soybean Producers Class.

505. Monsanto and BASF both failed to exercise reasonable care in this undertaking, which increased the risk of harm to Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class.

506. Defendants breached their duty and as a direct and proximate result, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

507. Monsanto and BASF each knew or ought to have known, in light of the surrounding circumstances, that its conduct would naturally or probably result in injury, and continued such conduct in reckless disregard of the consequences. Punitive damages thus are warranted.

**COUNT IX – BREACH OF IMPLIED WARRANTY (FITNESS)  
(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I and III-VIII, but in the alternative to Count II, Arkansas Plaintiffs assert this Count IX for breach of the implied warranty of fitness for a particular purpose.

508. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-507 as though fully alleged herein.

509. Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were injured due to the unsafe, defective, and dangerous Xtend Crop System and its components.

510. Monsanto and BASF knew that the dicamba-resistant trait, and seed containing that trait, would be used with dicamba herbicide applied over the top of soybean and cotton grown from dicamba-resistant seed.

511. Monsanto manufactured, and also sold and licensed for sale the dicamba-resistant trait and seed containing that trait into Arkansas.

512. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

513. In addition or in the alternative, Monsanto and BASF entered into one or more agreements for joint development of the dicamba-resistant trait and its commercialization. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

514. BASF also manufactured and sold Engenia as part of the Xtend Crop System for use over the top of soybean and cotton grown from seed containing the dicamba-resistant trait

515. Monsanto and BASF both marketed and promoted the trait, seed and Xtend Crop System, representing that the system was safe and could be used in a manner that would prevent off-target movement to susceptible non-dicamba resistant plants and crops.

516. Monsanto and BASF knew that purchasers of the Xtend Crop System rely on their skill and judgment to select or furnish suitable seed and corresponding herbicide for weed control that will not damage susceptible non-dicamba resistant plants and crops.

517. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait, and Xtend Crop System were fit for the particular purpose of controlling weeds without harm to non-resistant plants and crops.

518. The trait, seed and Xtend Crop System were not fit for such purpose, and thus Defendants breached the implied warranty of fitness for particular purpose.

519. Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class are people Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

520. As a direct and proximate result of such unfitness, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

521. To the extent required, Defendants received sufficient notice of their breach.

**COUNT X – BREACH OF IMPLIED WARRANTY (MERCHANTABILITY)**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I and III-IX, but in the alternative to Count II, Arkansas Plaintiffs assert this Count X for breach of the implied warranty of merchantability.

522. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-521 as though fully alleged herein.

523. Defendants are manufacturers, sellers and merchants of the kind at issue in this case.

524. To be merchantable, a product must be fit for the ordinary purpose for which it is used, and also must be adequately labeled.

525. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait and Xtend Crop System was fit for the ordinary purpose of controlling weeds without harm to other susceptible non-resistant plants and crops.

526. The trait, seed and Xtend Crop System were not fit for such purpose and were not adequately labeled and thus, Monsanto and BASF breached the implied warranty of merchantability.

527. Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class are people who Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

528. As a direct and proximate result of such unfitness, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

529. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XI – BREACH OF EXPRESS WARRANTY**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or the alternative to Counts I, and III- X, but in the alternative to Count II, Arkansas Plaintiffs assert this Count XI for breach of express warranty.

530. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-529 as though fully alleged herein.

531. Monsanto and BASF each made numerous affirmations of fact as well as promises and descriptions, of the Xtend Crop System and components thereof to buyers relating to the goods sold that became part of the basis of those bargains.

532. Representations, promises, and descriptions by Monsanto include that:

- a. Xtend seed is high-yield;
- b. the Xtend Crop System would result “in better performance and safety to nearby crops;”
- c. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- d. purchasers of the Xtend Crop System could apply the new dicamba formulations over the top of plants grown with dicamba-resistant seed with “proven” application methods without damaging off-target plants and crops;
- e. the Xtend Crop System can be used in a manner that will not damage off-target plants and crops.

533. Representations, promises, and descriptions by BASF include that:

- a. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- b. there would be “on-target herbicide application success with low volatility and drift so the herbicide stays in place;”
- c. Engenia minimizes volatility and is not “a chemistry that is dangerous;”
- d. Engenia offers “excellent . . . crop safety” and “low-volatility characteristics for improved on-target application;”
- e. the Xtend Crop System with Engenia offers at least a 70% reduction in volatility as compared to older (Clarity) formulations;
- f. Engenia is a “step-change improvement;”
- g. the Xtend Crop System would result “in better performance and safety to nearby crops;”

h. the Xtend Crop System offers significant reduction in any secondary loss profile as compared to other dicamba formulations;

i. advanced formulation “reduces loss from volatility.”

534. All these affirmations, promises, and descriptions created an express warranty that the goods would conform therewith.

535. All of these representations, promises, and descriptions were made for the purpose of, and did, induce reliance on the part of persons who purchased the Xtend Crop System.

536. The Xtend Crop System and its components did not conform with the express warranties created.

537. Arkansas Plaintiffs and other members of the Arkansas State Soybean Producers Class are persons who Monsanto and BASF might reasonably expect to be affected by the dangerous Xtend Crop System and its components.

538. As a direct and proximate cause of the failure of the Xtend Crop System and its components to conform to the express warranties, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

539. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XII – TRESPASS**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or the alternative to Counts I, and III-XI, but in the alternative to Count II, Arkansas Plaintiffs assert this Count XII for trespass.

540. Arkansas Plaintiffs incorporate by reference Paragraphs 1-382 and 418-539 as though fully alleged herein.

541. Monsanto and BASF intentionally designed, developed, promoted, marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of

allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

542. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide, including Engenia, as part of the Xtend Crop System with dicamba-resistant seed.

543. Monsanto and BASF or Monsanto, for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops, but that dicamba had and would move off target onto the land and growing crops without permission of rightful owners and possessors, including Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class.

544. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which Arkansas Plaintiffs/Class members have possession and without their permission.

545. Monsanto and BASF knew that such invasion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

546. In addition, Monsanto and BASF promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

547. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

548. Such invasion interfered with Arkansas Plaintiffs' and Class members' right of possession and caused substantial damage to their property.

549. As a direct and proximate result, Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class were damaged.

550. Monsanto and BASF each knew or ought to have known, in light of the surrounding circumstances, that its conduct would naturally or probably result in injury and continued such conduct in reckless disregard of the consequences. Punitive damages thus are warranted.

**COUNT XIII - CIVIL CONSPIRACY**  
**(on behalf of Arkansas Plaintiffs and the Arkansas Soybean Producers Class)**

In addition or in the alternative to Counts I – XII, Arkansas Plaintiffs assert this Count XIII for civil conspiracy.

551. Arkansas Plaintiffs incorporate by reference Paragraphs 1-550 as though fully alleged herein.

552. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

553. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba damage at the expense of producers like Arkansas Plaintiffs and other members of the Arkansas State Soybean Producers Class, whose non-resistant crops were damaged.

554. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

555. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

556. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

557. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

558. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

559. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

560. Defendants also knew that dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

561. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of Xtend seeds prior to any dicamba registered for in-crop use, with knowledge, intent and

certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybeans and/or cotton grown from dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

562. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

563. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

564. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

565. Defendants conspired to and did inadequately educate, train or instruct on safe use of the Xtend Crop System, notwithstanding that each clearly knew the importance thereof to have even minimal chance of safe use, also in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

566. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including Plaintiffs' crops, in Arkansas and other states.

567. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

568. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

569. Defendants' unlawful actions resulted in damage to Arkansas Plaintiffs and other members of the Arkansas Soybean Producers Class, who were harmed in the ways and manners described above.

**COUNT XIV - STRICT LIABILITY (ULTRAHAZARDOUS)  
(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Count I, Illinois Plaintiffs assert this Count XIV for strict liability, ultrahazardous activity.

570. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

571. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

572. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

573. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it.

BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

574. BASF provided a dicamba formulation to Monsanto, who added VaporGrip Technology and provided it to others, and both Defendants manufactured and sold dicamba herbicides for use over the top of growing crops.

575. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

576. Both Defendants sold and actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in Illinois.

577. Both Monsanto and BASF heavily marketed and promoted the Xtend Crop System as safe when it was not.

578. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

579. The risk of harm cannot be eliminated with exercise of reasonable care.

580. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

581. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

582. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

583. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

584. Temperature inversions occur frequently in Illinois. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

585. Defendants' design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in Illinois given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in Illinois.

586. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

587. A crop system entailing application of dicamba over the top of crops grown from dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

588. As a result of Defendants' activities, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

589. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XV - GENERAL NEGLIGENCE**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Count I, but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XV for general negligence.

590. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

591. Producers with non-resistant plants and crops susceptible to dicamba, including soybeans, are the most likely to be harmed by Defendants' irresponsible conduct.

592. Monsanto and BASF knew, but at minimum should have known, that development, commercialization, promotion, sale, and licensing of the dicamba-resistant trait would result in significant use of dicamba herbicide over the top of crops grown from seed containing that trait. The trait and seed were developed and sold for this very purpose, which both Monsanto and BASF intended and anticipated.

593. Monsanto and BASF further developed, marketed, sold, and licensed new supposedly "low" volatility formulations of dicamba specifically for use with seed containing the dicamba-resistant trait.

594. As Monsanto and BASF knew, even supposed "low-volatility" dicamba herbicides are still volatile, and still very prone to drift, creating high risk of moving off target and damaging susceptible non-resistant plants and crops.

595. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

596. To the extent damage resulted from drift and otherwise, it was foreseeable, and foreseen, by Monsanto and BASF that applicators could not or would not adhere to label instructions.

597. To the extent some applicators used older versions of dicamba, it was foreseeable, and foreseen, by Monsanto and BASF that they would do so.

598. Monsanto and BASF knew, but at minimum should have known, that conditions in areas, including Illinois, such as temperature inversions, predictably high dicamba usage, and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or drift.

599. It was foreseeable, and foreseen, that in-crop use of dicamba would result in damage to susceptible, non-resistant plants and crops, especially soybeans.

600. It was foreseeable, and foreseen, that injury to producers of susceptible non-resistant crops such as Illinois Plaintiffs and other members of the Illinois Soybean Producers Class would occur.

601. Monsanto and BASF have a duty of reasonable care to avoid foreseeable harm, and certainly a duty to not create, or continue, foreseeable risk of harm to Illinois Plaintiffs and other members of the Illinois Soybean Producers Class.

602. That duty is to exercise reasonable care and caution commensurate with the dangers to be reasonably anticipated under the circumstances.

603. Rather than exercise even ordinary care, Monsanto and BASF did just the opposite.

604. Monsanto widely sold, licensed and disseminated a dicamba-resistant trait specifically intended for use with dicamba applied during summer months over the top of crops grown from seed containing that trait, to the foreseeable injury of susceptible non-dicamba resistant plants and crops, especially soybeans.

605. As partner, joint venturer or joint enterprise with Monsanto, BASF is jointly liable.

606. In addition or in the alternative, BASF entered into one or more agreements with Monsanto to jointly design, develop and commercialize that trait and seed containing it. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the dicamba-resistant trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

607. BASF and Monsanto both designed, developed and accelerated the Xtend Crop System, made up of seed containing the dicamba-resistant trait and dicamba herbicide.

608. BASF supplied and/or licensed a dicamba formulation to Monsanto, and by extension others such as DuPont, and both Defendants manufactured and sold dicamba herbicide which they intended and knew would be used over the top of soybean and cotton grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System, to the foreseeable injury of non-resistant plants and crops.

609. Defendants also failed to adequately test the system with new formulations of dicamba. Monsanto affirmatively refused independent testing for volatility because it did not want to jeopardize federal registration.

610. Defendants also expressly undertook, but failed, to provide adequate education, training and instruction to users of the Xtend Crop System which they did or should have recognized as minimally necessary for the protection of persons including producers of susceptible non-dicamba resistant plants and crops, including soybeans, increasing the risk of harm to Illinois Plaintiffs and other members of the Illinois Soybean Producers Class.

611. Defendants also aggressively and misleadingly promoted the Xtend Crop System as safe when it was not, knowing and intending that such promotion would increase in-crop use of dicamba, and correspondingly, the risk of harm.

612. Monsanto also considered but refused to take action to prevent those who sprayed dicamba unregistered for in-crop use in 2015 and 2016 from doing so again, or refuse to sell dicamba-resistant seed to such persons, and did so for its own economic gain.

613. Defendants designed, developed, accelerated, sold, promoted, and disseminated the dicamba-resistant trait specifically for use with inadequately tested, volatile and drift-prone herbicide seriously dangerous to susceptible non-resistant crops, and in a manner most likely to create and increase risk and cause damage, including but not limited to aggressive and misleading marketing, licensing, and unlimited release of a much-touted crop system into areas such as Illinois with significant glyphosate-resistant weeds, foreseeably heavy use of dicamba under circumstances including common occurrence of inversions, inadequately trained and uncertified applicators, inadequate warnings, and heavy planting of highly susceptible crops such as soybeans, creating high probability of off-target movement and damage.

614. Defendants breached their duty of care.

615. As a direct and proximate result, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were damaged.

616. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XVI - STRICT LIABILITY (DESIGN DEFECT)**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I and XV but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XVI for strict liability, design defect.

617. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-616 as though fully alleged herein.

618. Monsanto and BASF both are in the business of designing, developing, testing, manufacturing, marketing, distributing and selling agricultural products, including biotechnology and herbicide products. Both, in the course of their business, designed, developed, tested, manufactured, marketed, distributed, licensed and/or sold the Xtend Crop System consisting of dicamba-resistant trait technology and seed containing that trait, and dicamba herbicides.

619. The dicamba-resistant trait, and seed containing that trait, was designed and developed by Monsanto and BASF specifically for use with dicamba herbicide as part of a crop system in which dicamba is sprayed over the top of crops grown from seed containing that trait in summer months and foreseeably, in the vicinity of non-dicamba resistant plants and crops susceptible to dicamba, including soybeans.

620. Monsanto and BASF further designed, developed, sold, and licensed new supposedly “low” volatility formulations of dicamba specifically for use with the dicamba-resistant trait and seed containing that trait.

621. The dicamba-resistant trait, and seed containing that trait, was manufactured, sold and licensed for sale by Monsanto.

622. As partner, joint venture or joint enterprise with Monsanto, BASF is jointly liable.

623. In addition or in the alternative, BASF itself sold or Monsanto commercialized, manufactured, sold, licensed and distributed the dicamba-resistant trait in soybean and cotton seed for itself and as agent for BASF, which shared profits therefrom.

624. Monsanto and BASF both designed and developed the Xtend Crop System. BASF also designed a dicamba herbicide formulation supplied and/or licensed to Monsanto, who added “VaporGrip Technology” and supplied the same to others. Both Defendants manufactured and sold dicamba herbicide for in-crop use. Both also actively marketed and promoted the Xtend Crop

System, dicamba-resistant seed, and in-crop use of dicamba, all for commercialization and to the benefit of both Monsanto and BASF.

625. Monsanto and BASF both in the ordinary course of their business placed the dicamba-resistant seed trait, seed containing that trait, and Xtend Crop System, into commerce within Illinois.

626. Defendants designed, manufactured, distributed, marketed, promoted, and sold the dicamba-resistant trait and seed containing that trait for the express and intended purpose of in-crop use of dicamba herbicide as an integrated crop system.

627. The Xtend Crop System was and is unsafe for the anticipated, foreseeable use by Xtend Crop System users of spraying dicamba herbicide over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably in the vicinity of susceptible non-dicamba resistant plants and crops including soybeans.

628. Ordinary users and consumers of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans. Indeed, Monsanto and BASF both represented the Xtend Crop System was safe and concealed the risks.

629. The dicamba-resistant trait, seed containing it, and the Xtend Crop System, as designed and used in intended and foreseeable manner were unreasonably dangerous in failing to perform as an ordinary consumer would expect, and additionally, the risk of danger inherent in such a design outweighs its benefits when put to such reasonably foreseeable use.

630. All dicamba currently on the market, including the new “low volatility” versions are volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

631. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

632. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

633. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

634. The dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were used as reasonably anticipated, and as designed and so used, were and are in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was foreseeable.

635. Illinois Plaintiffs and other members of the Illinois Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen when used for the purpose for which intended or as foreseeably may be used.

636. As a direct and proximate result of the defective condition of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were damaged.

637. Each Defendant’s conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XVII - STRICT LIABILITY (FAILURE TO WARN)**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I and XV-XVI, but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XVII for strict liability, failure to warn.

638. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-637 as though fully alleged herein.

639. As alleged, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in anticipated and foreseeable manner were and are unreasonably dangerous and defective at the time of sale.

640. Defendants failed to warn or to provide adequate warning of such defective condition, of which they knew or minimally should have known.

641. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

642. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of the Xtend Crop System and its components.

643. As alleged, ordinary users and consumers of the Xtend Crop System were unaware of such dangers, which by contrast, were foreseeable and foreseen by Defendants.

644. Monsanto and BASF failed to provide adequate warning or instruction by label or otherwise.

645. Moreover, the labels were false, misleading, and failed to contain warnings or instructions adequate to protect, or prevent harm to, the environment, including susceptible plants and crops, including soybeans.

646. Illinois Plaintiffs and other members of the Illinois Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use.

647. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XVIII - NEGLIGENT DESIGN**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I, and XV-XVII, but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XVIII for negligent design.

648. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-647 as though fully alleged herein.

649. Monsanto and BASF have a duty to use ordinary care to design a product that will be reasonably safe for its intended use.

650. The Xtend Crop System was intended and expected to be used with dicamba-resistant seed and dicamba herbicide sprayed over the top of crops grown from that seed in summer months and foreseeably, in the vicinity of susceptible non-dicamba resistant plants and crops, creating high risk of serious harm to those non-resistant plants and crops, including soybeans.

651. As Monsanto and BASF knew or at minimum should have known, even supposed "low-volatility" dicamba herbicides are still volatile, prone to drift, and at high risk of moving off target and damaging susceptible non-dicamba resistant plants and crops.

652. All dicamba currently on the market, including the new "low-volatility" versions, is volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

653. Defendants failed to use ordinary care in designing the trait, seed and Xtend Crop System which are unreasonably dangerous and defective.

654. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

655. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

656. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

657. As a direct and proximate result of Defendants' failure to use reasonable care in design of dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were damaged.

658. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XIX - NEGLIGENT FAILURE TO WARN**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I, and XV-XVIII, but in the alternative to Count XIV Illinois Plaintiffs assert this Count XIX for negligent failure to warn.

659. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-658 as though fully alleged herein.

660. Monsanto and BASF have a duty to adequately warn when a product possesses dangerous propensities and there is unequal knowledge with respect to the risk of harm and, possessed of such knowledge, they knew or should have known that harm may occur absent such warning.

661. The dangers of the Xtend Crop System and its components were foreseeable, and foreseen, by Monsanto and BASF.

662. Defendants failed to exercise reasonable care to warn and adequately warn of the risks of harm. To the contrary, both misrepresented and concealed the dangers.

663. Defendants breached their duty and as a direct and proximate result, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were damaged.

664. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XX - NEGLIGENT TRAINING  
(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts 1, and XV-XIX, but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XX for negligent training.

665. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-664 as though fully alleged herein.

666. Monsanto and BASF have a duty to provide adequate training and instruction for safe use of their products.

667. Monsanto and BASF failed to provide adequate training and instruction to their employees, agents, licensees or distributors or to users of the Xtend Crop System.

668. Adequate instruction and training was not provided by education or training, and none of the labels contain instruction for use that would, if followed, prevent harm to the environment and susceptible, non-resistant plants and crops including soybeans.

669. In addition to duty imposed by law, Monsanto and BASF each specifically undertook to render services to growers who used the Xtend Crop System, including the provision

of stewardship tools, education and training, which both recognized to be necessary for minimal protection of third persons or their things, including Plaintiffs and members of the Illinois Soybean Producers Class.

670. Monsanto and BASF both failed to exercise reasonable care in this undertaking, which increased the risk of harm to Illinois Plaintiffs and other members of the Illinois Soybean Producers Class.

671. Defendants breached their duty and as a direct and proximate result, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were damaged.

672. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XXI - TRESPASS**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I and XV-XX but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XXI for trespass.

673. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-672 as though fully alleged herein.

674. Monsanto and BASF intentionally designed, developed, promoted, marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

675. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide as part of the Xtend Crop System with dicamba-resistant seed.

676. Monsanto and BASF, or Monsanto for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops, but that dicamba had and would move off target onto the land and growing crops without permission of rightful owners and possessors, including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class.

677. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which Illinois Plaintiffs/Class Members have possession and without their permission.

678. Monsanto and BASF knew that such intrusion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

679. In addition, both Defendants promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

680. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

681. Such invasion interfered with Illinois Plaintiffs' and other Illinois Soybean Producer Class members' right of possession and caused substantial damage to their property.

682. As a direct and proximate result, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were damaged.

683. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XXII - NUISANCE**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I and XV-XXI but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XXII for nuisance.

684. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-683 as though fully alleged herein.

685. The conduct of Monsanto and BASF interfered with the use and enjoyment of land by Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, who were and are entitled to that use.

686. Monsanto and BASF each acted for the purpose of causing an invasion of dicamba onto these Plaintiffs' and Class Members' land and crops or knew that such an invasion was substantially certain to result from its conduct.

687. The interference and resulting physical harm were substantial, constituting an unreasonable interference with these Plaintiffs' and Class Members' use and enjoyment of the land, and caused substantial damage to their property.

688. As a direct and proximate result, Illinois Plaintiffs and other members of the Illinois Soybean Producers Class were damaged.

689. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

**COUNT XXIII - Illinois Consumer Fraud and Deceptive Business Practices Act  
(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I and XV-XXII, but in the alternative to Count XIV, Illinois Plaintiffs assert this Count XXIII for unfair and/or deceptive acts or practices in violation of the Illinois Consumer Fraud and Deceptive Business Practices Act (“ICFDPA”).

690. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 591-689 as though fully alleged herein.

691. Pursuant to 815 Ill. Comp. Stat. 505/2, “[u]nfair methods of competition and unfair or deceptive acts or practices . . . in the conduct of any trade or commerce” are unlawful under the ICFDPA.

692. The dicamba-resistant trait, seed containing that trait and the Xtend Crop System are objects, goods, and/or commodities constituting merchandise subject to the ICFDPA pursuant to 815 Ill. Comp. Stat. 505/1.

693. Defendants engaged in numerous deceptive and/or unfair acts or practices in connection with their design, development, acceleration, marketing, promotion, and commercialization of the dicamba-resistant seed trait, seed containing that trait and the Xtend Crop System as set forth herein including, but not limited to:

- a. Placing into the market a dicamba-resistant seed trait, seed containing that trait and Xtend Crop System when they knew and at minimum should have known that the seed and system would result in the spraying of dicamba herbicides over the top of growing crops, causing damage to non-resistant plants and crops;
- b. Heavily, consistently and misleadingly marketing, representing and promoting the Xtend Crop System as safe when it was not;
- c. Failing to adequately warn and failing to train persons including consumers and users of the Xtend Crop System which they knew and minimally should have known was necessary for safe use;

d. By their damage-producing crop system, pressuring farmers to purchase seed containing dicamba-resistant trait out of self-defense, while increasing profits for themselves through licensing and sale of both seed and herbicides.

694. Defendant's practices, as set forth above, were unfair in that:

- a. The practices offend public policy in that they involved a crop system with high risk of serious harm to others, resulting in one or more offenses recognized in law including but not limited to violation of the Lanham Act, breach of duty, strict liability for unreasonably dangerous products, trespass and/or nuisance;
- b. The practices were and are immoral, oppressive and unscrupulous in that, among other things, they impose an unreasonable burden on the farming industry and are so oppressive as to leave farmers with little alternative but to submit to the practices. Soybean and other farmers have no control over the exposure of their non-resistant crops to dicamba and no reasonable ability to prevent dicamba from entering onto their land other than to purchase dicamba-resistant seed (while even that option is not available to farmers growing plants and crops for which dicamba-resistant seed does not exist); and
- c. The practices caused substantial injury to farmers in that it caused the damage to susceptible, non-resistant plants and crops.

695. Defendants' unfair and/or deceptive practices and conduct was directed toward the public and consumers of seed containing the dicamba-resistant trait and the Xtend Crop System as well as other soybean and cotton producers. Defendants intended consumers to rely on their unfair and/or deceptive acts and practices.

696. Defendants' unfair and/or deceptive acts and practices occurred during the course of conduct involving trade or commerce.

697. Illinois producers, including soybean producers, incurred damages due to volatilization and/or drift of dicamba herbicide resulting in damage to non-dicamba-resistant plants and crops due to Defendants' unfair and/or deceptive acts and practices.

698. Injury to Plaintiffs' susceptible, non-resistant soybean crops and resulting yield loss were directly and proximately caused by Defendants' unfair acts and practices.

699. Defendants' conduct was addressed to the market generally and otherwise implicates consumer protection concerns and, therefore, a consumer nexus exists in that:

- a. Defendants' acts and practices were directed to all soybean and cotton farmers generally; and
- b. Defendants' acts and practices otherwise implicate consumer protection concerns including, but not limited to, not unreasonably risking the welfare of non-dicamba resistant crops or minimizing the potential for damaging non-dicamba resistant crops.

700. Illinois Plaintiffs are authorized to bring a private action under the ICFDPA pursuant to 815 Ill. Comp. Stat. 505/10(a), which provides that “[a]ny person who suffers actual damage as a result of a violation of [the ICFDPA] committed by any other person may bring an action against such person.”

701. Each Defendant's conduct was willful, wanton, and in reckless disregard for the rights of others including Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, and punitive damages are thus warranted.

702. Reasonable attorneys' fees and costs should be awarded pursuant to 815 Ill. Comp. Stat. 505/10a.

**COUNT XXIV - CIVIL CONSPIRACY**  
**(on behalf of Illinois Plaintiffs and the Illinois Soybean Producers Class)**

In addition or in the alternative to Counts I and XIV-XXIII, Illinois Plaintiffs assert this Count XXIV for civil conspiracy.

703. Illinois Plaintiffs incorporate by reference Paragraphs 1-382 and 570-702 as though fully alleged herein.

704. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more

sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

705. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba damage at the expense of producers like Illinois Plaintiffs and other members of the Illinois Soybean Producers Class, whose non-resistant crops were damaged.

706. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

707. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

708. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

709. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

710. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

711. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

712. Defendants also knew that the dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

713. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of dicamba-resistant seed prior to any dicamba registered for in-crop use, with knowledge, intent and certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybeans and/or cotton grown from dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

714. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

715. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

716. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

717. Defendants conspired to and did inadequately educate, train or instruct on safe use of the Xtend Crop System, notwithstanding that each clearly knew the importance thereof to have even minimal chance of safe use, also in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

718. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including Plaintiffs' crops, in Illinois and other states.

719. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

720. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

721. Defendants' unlawful actions resulted in damages to Illinois Plaintiffs and other members of the Illinois Soybean Producers Classes, who were harmed in the ways and manners described above.

**COUNT XXV - STRICT LIABILITY (ULTRAHAZARDOUS)  
(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Count I, Kansas Plaintiffs assert this Count XXV for strict liability, ultrahazardous activities.

722. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

723. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

724. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

725. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it. BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

726. BASF provided a dicamba formulation to Monsanto, who added VaporGrip Technology and provided it to others, and both Defendants manufactured and sold dicamba herbicides for use over the top of growing crops.

727. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

728. Both Defendants actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in Kansas.

729. Both Monsanto and BASF heavily marketed and promoted the Xtend Crop System as safe when it was not.

730. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

731. The risk of harm cannot be eliminated with exercise of reasonable care.

732. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

733. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

734. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

735. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

736. Temperature inversions occur frequently in Kansas. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

737. Defendants’ design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in Kansas given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in Kansas.

738. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

739. A crop system entailing application of dicamba over the top of crops grown from dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

740. As a result of Defendants' activities, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

741. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXVI - STRICT PRODUCT LIABILITY (DESIGN DEFECT)**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Count I, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXVI for strict product liability, design defect.

742. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

743. Pursuant to K.S.A. 60-3301 *et seq.*, a supplier of a product is liable for harm to another person or his property if: (1) the supplier is engaged in the business of manufacturing, selling, or distributing the product; (2) the product was supplied in a defective condition that rendered it unreasonably dangerous; and (3) the defective condition proximately caused harm to person or property.

744. A "seller" includes "a manufacturer, wholesaler, distributor or retailer." K.S.A. § 60-3302(a). A "manufacturer" includes a product seller who designs, produces, makes, fabricates, constructs or remanufactures a product or component part of a product before sale. K.S.A. § 60-3302(b).

745. Monsanto and BASF have a partnership, joint venture, and joint enterprise for the Xtend Crop System consisting of the dicamba-resistant trait, seed containing it, and dicamba herbicides.

746. The dicamba-resistant trait, and seed containing that trait, was manufactured, sold and licensed for sale by Monsanto.

747. As partner, joint venturer or joint enterprise with Monsanto, BASF is jointly liable.

748. In addition or in the alternative, BASF is itself sold or Monsanto commercialized, manufactured, sold and distributed that trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

749. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who added VaporGrip Technology and supplied the same to others including DuPont, and both manufactured and sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistant trait.

750. Monsanto and BASF each is engaged in the business of manufacturing, selling and distributing the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System and is a product seller and manufacturer for purposes of K.S.A. 60-3302.

751. The Xtend Crop System was and is unsafe for the anticipated, foreseeable use by Xtend Crop System users of spraying dicamba herbicide over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably in the vicinity of susceptible non-dicamba resistant crops including soybeans.

752. All dicamba currently on the market is volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

753. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

754. To the extent damage resulted from drift and otherwise, it was reasonably foreseeable, and indeed foreseen, that applicators could not or would not follow label instructions.

755. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

756. The dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were used as reasonably anticipated, and as designed and so used, were and are in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was foreseeable.

757. The trait, seed and Xtend Crop System were and are unreasonably dangerous when put to ordinary and intended use, reasonably foreseeable and actually foreseen by Monsanto and BASF as highly likely to result in injury, and to an extent beyond that which would be contemplated by an ordinary consumer possessing ordinary knowledge as to their characteristics.

758. Ordinary consumers and users of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans. Indeed, Monsanto and BASF both represented that the Xtend Crop System was safe and concealed the dangers.

759. Kansas Plaintiffs and other members of the Kansas Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen, when used for the purpose for which intended or as foreseeable may be used.

760. As a direct and proximate result of the defective condition of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

761. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas State Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXVII - STRICT LIABILITY (FAILURE TO WARN)**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Counts I and XXVI, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXVII for strict products liability, failure to warn.

762. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-761 as though fully alleged herein.

763. As alleged, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in anticipated and foreseeable manner were and are unreasonably dangerous and defective at the time of sale.

764. Defendants failed to warn or to provide adequate warning of such defective condition, of which they knew or minimally should have known.

765. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

766. A product is defective under K.S.A. § 60-3302 if the manufacturer, producer, seller or assembler fails to adequately warn of its dangers, hazards or risks or fails to adequately instruct on safe use.

767. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of the Xtend Crop System and its components.

768. As alleged, ordinary users and consumers of the Xtend Crop System were unaware of such dangers, which by contrast, were foreseeable and foreseen by Defendants.

769. Adequate warning and instruction were not provided by label or otherwise.

770. Moreover, the labels were false, misleading and failed to contain warnings or instructions adequate to protect, or to prevent harm to the environment including susceptible plants and crops, including soybeans.

771. Kansas Plaintiffs and other members of the Kansas Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use.

772. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXVIII - NEGLIGENT DESIGN**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Counts I and XXVI-XXVII, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXVIII for negligent design.

773. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-772 as though fully alleged herein.

774. Monsanto and BASF have a duty to use ordinary care in the design of their products so that they will be reasonably safe for the use intended or use that can reasonably be anticipated and for the ordinary consumer possessing knowledge common to the community as to the product's characteristics.

775. The Xtend Crop System was intended and expected to be used with dicamba-resistant seed and dicamba herbicides sprayed over the top of crops grown from that seed in summer months and foreseeably, in the vicinity of susceptible non-dicamba-resistant plants and crops, creating high risk of serious harm to those non-resistant plants and crop, including soybeans.

776. As Monsanto and BASF knew or at minimum should have known, even supposed “low-volatility” dicamba herbicides are still volatile, prone to drift, and at high risk of moving off target and damaging susceptible non-dicamba resistant plants and crops.

777. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

778. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions

779. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

780. As a direct and proximate result of Defendant’s failure to use ordinary care in the design of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

781. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXIX - NEGLIGENT FAILURE TO WARN**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Counts I and XXVI-XXVIII, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXIX for negligent failure to warn.

782. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-781 as though fully alleged herein.

783. Monsanto and BASF knew or by the exercise of ordinary care should have known that the Xtend Crop System and its components were potentially dangerous and Defendants have a duty to give adequate warning about such danger.

784. Monsanto and BASF failed to exercise reasonable care to warn and adequately warn of the dangers. To the contrary, each misrepresented and concealed the dangers.

785. Defendants breached their duty and as a direct and proximate result, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

786. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXX - NEGLIGENT TRAINING  
(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Counts I and XXVI-XXIX but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXX for negligent training.

787. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-786 as though fully alleged herein.

788. Monsanto and BASF have a duty to provide adequate training and instruction for safe use of their products.

789. Monsanto and BASF failed to provide adequate training and instruction to their employees, agents, licensees or distributors, or to users of the Xtend Crop System.

790. Adequate instruction was not provided by education or training, and none of the labels contain instruction for use that would, if followed, prevent harm to the environment including susceptible, non-resistant plants and crops including soybeans.

791. In addition to duty imposed by law, Monsanto and BASF each specifically undertook to render services to users of the Xtend Crop System, including the provision of stewardship tools, education and training, which both recognized to be minimally necessary for the protection of third persons or their property, including Kansas Plaintiffs and other members of the Kansas State Soybean Producers Class.

792. Monsanto and BASF both failed to exercise reasonable care in this undertaking, which increased the risk of harm to Kansas Plaintiffs and other members of the Kansas Soybean Producers Class.

793. Defendants breached their duty and as a direct and proximate result, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

794. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXXI - BREACH OF IMPLIED WARRANTY (FITNESS)  
(on behalf of Kansas Plaintiffs and the Kansas Soybean Producer Class)**

In addition or in the alternative to Counts I and XXVI-XXX, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXXI for breach of the implied warranty of fitness for particular purpose.

795. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-794 as though fully alleged herein.

796. Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were injured due to the unsafe, defective, and dangerous Xtend Crop System and its components.

797. Monsanto and BASF knew that the dicamba-resistant trait, and seed containing that trait, would be used with dicamba herbicide applied over the top of soybean and cotton grown from dicamba-resistant seed.

798. Monsanto manufactured, and also sold and licensed for sale the dicamba-resistant trait and seed containing that trait into Kansas.

799. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

800. In addition or in the alternative, Monsanto and BASF entered into one or more agreements for joint development of the dicamba-resistant trait and its commercialization. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

801. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who added VaporGrip Technology and supplied the same to others, including DuPont, and both Defendants manufactured and sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistance trait.

802. Monsanto and BASF both marketed and promoted the trait, seed, and Xtend Crop System, representing that the system was safe and could be used in a manner that would prevent off-target movement to susceptible non-dicamba resistant plants and crops.

803. Monsanto and BASF knew that purchasers of the Xtend Crop System rely on their skill and judgment to select or furnish suitable seed and corresponding herbicide for weed control that will not damage susceptible non-dicamba resistant plants and crops.

804. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were fit for the particular purpose of controlling weeds without harm to non-resistant plants and crops.

805. The trait, seed and Xtend Crop System were not fit for such purpose, and thus Monsanto and BASF breached the implied warranty of fitness for a particular purpose.

806. Kansas Plaintiffs and other members of the Kansas Soybean Producers Class are people Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

807. As a direct and proximate result of such unfitness, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

808. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XXXII - BREACH OF IMPLIED WARRANTY (MERCHANTABILITY)**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Counts I and XXVI-XXXI, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXXII for breach of the implied warranty of merchantability.

809. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-808 as though fully alleged herein.

810. Defendants are manufacturers, sellers and merchants of goods of the kind at issue in this case.

811. To be merchantable, a product must be fit for the ordinary purpose for which it is used, and also must be adequately labeled.

812. Monsanto and BASF warranted that the trait, seed and Xtend Crop System was fit for the ordinary purpose of controlling weeds without harm to other susceptible non-dicamba resistant plants and crops.

813. The trait, seed and Xtend Crop System were not fit for such purpose and were not adequately labeled, and thus Monsanto and BASF breached the implied warranty of fitness of merchantability.

814. Kansas Plaintiffs and members of the Kansas Soybean Producers Class are people who Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

815. As a direct and proximate result of such unfitness, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

816. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XXXIII - BREACH OF EXPRESS WARRANTIES  
(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Counts I and XXVI-XXXII, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXXIII for breach of express warranties.

817. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-816 as though fully alleged herein.

818. Monsanto and BASF each made numerous affirmations of fact as well as promises and descriptions of the Xtend Crop System and components thereof to buyers relating to the goods sold that became part of the basis of those bargains.

819. Representations, promises, and descriptions by Monsanto include that:

- a. Xtend seed is high-yield;

- b. the Xtend Crop System would result “in better performance and safety to ‘nearby crops,’”
- c. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- d. purchasers of the Xtend Crop System could apply the new dicamba formulations over the top of plants grown with dicamba-resistant seed with “proven” application methods without damaging off-target plants and crops;
- e. VaporGrip Technology provides a “[s]tep-change reduction in volatility;”
- f. XtendiMax has a “significant reduction in volatility potential,” has “[l]ow volatility” and “[w]ill provide applicators confidence in on-target application of dicamba in combination with application requirements for successful on-target applications;”
- g. VaporGrip Technology is a “[r]evolutionary [b]reakthrough” which “significantly minimizes dicamba’s volatility potential after spraying – provides growers and applicators confidence in on target application of dicamba” and growers can “[a]pply [w]ith [c]onfidence;”
- h. the Xtend Crop System can be used in a manner that will not damage off-target plants and crops.

820. Representations, promises, and descriptions by BASF include that:

- a. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- b. there would be “on-target herbicide application success with low volatility and drift so the herbicide stays in place;”
- c. Engenia minimizes volatility and is not “a chemistry that is dangerous;”
- d. Engenia offers “excellent . . . crop safety” and “low-volatility characteristics for improved on-target application;”
- e. the Xtend Crop System with Engenia offers at least a 70% reduction in volatility as compared to older (Clarity) formulations;
- f. Engenia is a “step-change improvement;”

- g. the Xtend Crop System would result “in better performance and safety to nearby crops;”
- h. The Xtend Crop System offers significant reduction in any secondary loss profile as compared to older dicamba formulations;
- i. advanced formulation “reduces loss from volatility.”

821. All these affirmations, promises, and descriptions created an express warranty that the goods would conform therewith.

822. All of these representations, promises, and descriptions were made for the purpose of, and did, induce reliance on the part of persons who purchased the Xtend Crop System.

823. The Xtend Crop System and its components did not conform with the express warranties created.

824. Kansas Plaintiffs and other members of the Kansas Soybean Producers Class are persons who Monsanto and BASF might reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

825. As a direct and proximate result of Defendants’ breach of express warranty, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

826. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XXXIV - TRESPASS**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or the alternative to Counts I and XXVI-XXXIII, but in the alternative to Count XXV, Kansas Plaintiffs assert this Count XXXIV for trespass.

827. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-826 as though fully alleged herein.

828. Monsanto and BASF intentionally designed, developed, promoted, marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of

allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

829. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide as part of the Xtend Crop System with dicamba-resistant seed.

830. Monsanto and BASF or Monsanto, for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops, but that dicamba had and would move off target onto the land and growing crops without permission of rightful owners and possessors, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class.

831. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which Kansas Plaintiffs/Class members have possession and without their permission.

832. Monsanto and BASF knew that such invasion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

833. In addition, Monsanto and BASF promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

834. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

835. Such invasion interfered with Kansas Plaintiffs' and Class members' right of possession and caused substantial damage to their property.

836. As a direct and proximate result, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

837. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXXV - NUISANCE**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition or in the alternative to Counts I and XXVI-XXXIV but in alternative to Count XXV, Kansas Plaintiffs assert this Count XXXV for nuisance.

838. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 743-837 as though fully alleged herein.

839. The conduct of Monsanto and BASF interfered with the use and enjoyment of land by Kansas Plaintiffs and other members of the Kansas Soybean Producers Class, who were and are entitled to that use.

840. Monsanto and BASF each acted for the purpose of causing an invasion of dicamba onto these Plaintiffs' and Class Members' land and crops or knew that such an invasion was substantially certain to result from its conduct.

841. The interference and resulting physical harm were substantial, constitute an unreasonable interference with these Plaintiffs' and Class Members' use and enjoyment of the land, and caused substantial damage to their property.

842. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Kansas Plaintiffs and other members of the Kansas Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXXVI - CIVIL CONSPIRACY**  
**(on behalf of Kansas Plaintiffs and the Kansas Soybean Producers Class)**

In addition to Counts I and XXV-XXXV, Kansas Plaintiffs assert this Count XXXVI for civil conspiracy.

843. Kansas Plaintiffs incorporate by reference Paragraphs 1-382 and 722-842 as though fully alleged herein.

844. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

845. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba damage at the expense of producers like Kansas Plaintiffs and other members of the Kansas State Soybean Producers Class, whose non-resistant crops were damaged.

846. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

847. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

848. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

849. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

850. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

851. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

852. Defendants also knew that the dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

853. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of dicamba-resistant seeds prior to any dicamba registered for in-crop use, with knowledge, intent and certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybean and/or cotton grown with dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

854. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

855. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either

use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

856. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

857. Defendants conspired to and did inadequately educate, train or instruct on safe use of the Xtend Crop System, notwithstanding that each clearly knew the importance thereof to have even minimal change of safe use, also in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicide.

858. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including Plaintiffs' crops, in Kansas and other states.

859. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

860. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

861. Defendants' unlawful actions resulted in damage to Kansas Plaintiffs and other members of the Kansas Soybean Producers Class, who were harmed in the ways and manners described above.

**COUNT XXXVII - STRICT LIABILITY (ULTRAHAZARDOUS)  
(on behalf of Mississippi Plaintiffs and the Mississippi Soybean Producers Class)**

In addition or in the alternative to Count I, Mississippi Plaintiffs assert this Count XXXVII for strict liability, ultrahazardous activity.

862. Mississippi Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

863. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

864. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

865. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it. BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

866. BASF provided a dicamba formulation to Monsanto, who added VaporGrip Technology and provided it to others, and both sold dicamba herbicides for use over the top of growing crops.

867. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

868. Both Defendants actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in Mississippi.

869. Both Monsanto and BASF heavily marketed and promoted the Xtend Crop System as safe when it was not.

870. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

871. The risk of harm cannot be eliminated with exercise of reasonable care.

872. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

873. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

874. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

875. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

876. Temperature inversions occur frequently in Mississippi. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

877. Defendants' design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in Mississippi given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in Mississippi.

878. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

879. A crop system entailing application of dicamba over the top of crops grown from dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

880. As a result of Defendants' activities, Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

881. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXXVIII - FAILURE TO WARN**  
**(on behalf of Mississippi Plaintiffs and the Mississippi Soybean Producers Class)**

In addition or in the alternative to Count I but in the alternative to Count XXXVII, Mississippi Plaintiffs assert this Count XXXVIII for products liability, failure to warn pursuant to Miss. Code Ann. § 11-1-63(a)(i)(2).

882. Mississippi Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

883. Monsanto and BASF have a partnership, joint venture, and joint enterprise for the Xtend Crop System consisting of dicamba-resistant seed and dicamba herbicides.

884. As partner, joint venturer or joint enterprise with Monsanto, BASF is jointly liable.

885. In addition or in the alternative, Monsanto and BASF entered into one or more agreements for joint development of the dicamba-resistant trait and its commercialization. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed that trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

886. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who supplied the same to others, including DuPont, and both Defendants sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistant trait.

887. Monsanto and BASF each is engaged in the business of manufacturing, designing, and selling the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System and is a manufacturer, designer and seller for purposes of Miss. Code Ann. § 11-1-63.

888. Pursuant to Miss. Code Ann. § 11-1-63, Monsanto and BASF were required to provide adequate warnings or instructions that a reasonably prudent person in the same or similar circumstances would, as here, have provided with respect to danger(s) and that communicates sufficient information on the dangers and safe use of a product.

889. Ordinary users and consumers of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans.

890. Defendants, however, knew or in light of reasonably available knowledge should have known about the dangers and that the ordinary user or consumer would not.

891. The dicamba-resistant trait, seed containing it, and the Xtend Crop System, utilized volatile and drift-prone dicamba herbicide without warnings or instructions that communicated sufficient information on the dangers and safe use of the seed and system.

892. Monsanto and BASF failed to provide sufficient information by education or training. To the contrary, Defendants misrepresented and concealed the risks and hazards of the Xtend Crop System and its components. Neither was adequate warning or instruction provided by label or otherwise. The labels were false, misleading and failed to contain warnings or instructions adequate to protect, or to prevent harm to the environment including susceptible plants and crops, including soybeans.

893. Failure to provide adequate warnings and instruction rendered the seed and system unreasonably dangerous and defective at the time of sale.

894. Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class are persons to whom injury was reasonably foreseeable, and foreseen.

895. As a direct and proximate result of Defendants' failure to warn, Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class were damaged.

896. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XXXIX - BREACH OF IMPLIED WARRANTY (FITNESS)  
(on behalf of Mississippi Plaintiffs and the Mississippi Soybean Producers Class)**

In addition or in the alternative to Counts I and XXXVIII, but in the alternative to Count XXXVII, Mississippi Plaintiffs assert this Count XXXIX for breach of the implied warranty of fitness for particular purpose.

897. Mississippi Plaintiffs incorporate by reference Paragraphs 1-382 and 883-896 as though fully alleged herein.

898. Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class were injured due to the defective Xtend Crop System and its components.

899. Monsanto and BASF both knew that the dicamba-resistant trait, and seed containing that trait, would be used with dicamba herbicide applied over the top of soybean and cotton grown from dicamba-resistant seed.

900. Monsanto sold the dicamba-resistant trait and seed containing that trait, into Mississippi.

901. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

902. In addition or in the alternative, Monsanto and BASF entered into one or more agreements for joint development of the dicamba-resistant trait and its commercialization. BASF itself sold or Monsanto commercialized, manufactured, sold, and distributed that trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

903. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who added VaporGrip Technology and supplied the same to others, including DuPont, and both Defendants manufactured and sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistant trait.

904. Monsanto and BASF both marketed and promoted the trait, seed, and the Xtend Crop System, representing that the system was safe and could be used in a manner that would prevent off-target movement to susceptible non-dicamba resistant plants and crops.

905. Monsanto and BASF knew that purchasers of the Xtend Crop System rely on their skill and judgment to select or furnish suitable seed and corresponding herbicide for weed control that will not damage susceptible non-dicamba resistant plants and crops.

906. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were fit for the particular purpose of controlling weeds without harm to non-resistant plants and crops.

907. The trait, seed and Xtend Crop System were not fit for such purpose and thus Monsanto and BASF breached the implied warranty of fitness for particular purpose.

908. Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class are people Monsanto and BASF would reasonably have expected to be affected by the defective Xtend Crop System and its components.

909. As a direct and proximate result of such unfitness, Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class were damaged.

910. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XL - BREACH OF IMPLIED WARRANTY (MERCHANTABILITY)  
(on behalf of Mississippi Plaintiffs and the Mississippi Soybean Producers Class)**

In addition or in the alternative to Counts I and XXXVIII-XXXIX, but in the alternative to Count XXXVII, Mississippi Plaintiffs assert this Count XL for breach of the implied warranty of merchantability.

911. Mississippi Plaintiffs incorporate by reference Paragraphs 1-382 and 883-910 as though fully alleged herein.

912. Defendants are manufacturers, sellers and merchants of goods of the kind at issue in this case.

913. To be merchantable, a product must be fit for the ordinary purpose for which it is used and adequately labeled.

914. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait, and Xtend Crop System was fit for the ordinary purpose of controlling weeds without harm to other susceptible non-dicamba resistant plants and crops when it was not.

915. The trait, seed and Xtend Crop System were not fit for such purpose and were not adequately labeled and thus, Monsanto and BASF breached the implied warranty of fitness of merchantability.

916. Mississippi Plaintiffs and members of the Mississippi Soybean Producers Class are people who Monsanto and BASF would reasonably have expected to be affected by the defective system and its components.

917. As a direct and proximate result of such unfitness, Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class were damaged.

918. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XLI - NUISANCE**  
**(on behalf of Mississippi Plaintiffs and the Mississippi Soybean Producers Class)**

In addition or in the alternative to Counts I and XXXVIII-XL, but in the alternative to Count XXXVII, Mississippi Plaintiffs assert this Count XLI for nuisance.

919. Mississippi Plaintiffs incorporate by reference Paragraphs 1-382 and 883-918 as though fully alleged herein.

920. The conduct of Monsanto and BASF interfered with the use and enjoyment of land by Mississippi Plaintiffs and members of the Mississippi Soybean Producers Class, who were and are entitled to that use.

921. Monsanto and BASF each acted for the purpose of causing an invasion of dicamba onto these Plaintiffs' and Class Members' land and crops or knew that such an invasion was substantially certain to result from its conduct.

922. The interference and resulting physical harm were substantial, constitute an unreasonable interference with these Plaintiffs' and Class Members' use and enjoyment of the land, and caused substantial damage to their property.

923. The conduct of Monsanto and BASF was malicious and constitutes a willful and wanton invasion of the rights of others, including Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XLII - CIVIL CONSPIRACY**  
**(on behalf of Mississippi Plaintiffs and the Mississippi Soybean Producers Class)**

In addition or in the alternative to Counts I and XXXVII- XLI, Mississippi Plaintiffs assert this Count XLII for civil conspiracy.

924. Mississippi Plaintiffs incorporate by reference Paragraphs 1-382 and 862-923 as though fully alleged herein.

925. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

926. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba

damage at the expense of producers like Mississippi Plaintiffs and other members of the Mississippi State Soybean Producers Class, whose non-resistant crops were damaged.

927. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

928. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

929. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

930. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

931. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

932. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

933. Defendants also knew that the dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

934. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of dicamba-resistant seeds prior to any dicamba registered for in-crop use, with knowledge, intent and certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybean and/or cotton grown with dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

935. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

936. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

937. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

938. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including Plaintiffs' crops, in Mississippi and other states.

939. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

940. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

941. Defendants' unlawful actions resulted in damage to Mississippi Plaintiffs and other members of the Mississippi Soybean Producers Class, who were harmed in the ways and manners described above.

**COUNT XLIII – GENERAL NEGLIGENCE**  
**(on behalf of Missouri 2016 Plaintiffs and 2016 Missouri Soybean Producers Class)**

In addition or in the alternative to Count I, Missouri Plaintiffs sustaining dicamba damage in 2016 assert this Count XLIII for general negligence.

942. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

943. Producers with non-resistant plants and crops susceptible to dicamba, including soybeans, are the most likely to be harmed by Defendants' irresponsible conduct.

944. Monsanto and BASF knew, but at bare minimum should have known, that release of the dicamba-resistant trait in soybean, as well as cotton, in 2016 would result in spraying of dicamba herbicide over the top of those crops during summer months and foreseeably, in the vicinity of susceptible non-dicamba resistant plants and crops, including soybeans.

945. Monsanto and BASF encouraged use of older version dicamba products, not compatible with or registered for use over the top of growing crops. At minimum, however, such use was foreseeable and actually foreseen.

946. Defendants knew that such dicamba is volatile and prone to drift, in either event at high risk of moving off target and damaging susceptible non-dicamba resistant plants and crops.

947. Monsanto and BASF knew, but at minimum should have known, that conditions in areas, including Missouri, such as temperature inversions, predictably high dicamba usage, and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or drift.

948. Monsanto and BASF each had a duty of reasonable care to avoid foreseeable harm, and certainly to not create or continue foreseeable risk of harm to Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class.

949. That duty is to exercise reasonable care and caution commensurate with the dangers to be reasonably anticipate under the circumstances.

950. Monsanto released the dicamba-resistant trait and seed containing it when it was highly likely, foreseeable, and foreseen that persons would spray older versions of dicamba to the injury of susceptible non-resistant crops.

951. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

952. In addition or in the alternative, BASF entered into one or more agreements with Monsanto to jointly design, develop and commercialize that trait and seed containing it. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the dicamba-resistant trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

953. Both Defendants misrepresented and concealed the dangers of applying dicamba over the top of crops grown from seed containing the dicamba-resistant trait and failed to adequately warn or train employees, agents, licensees, distributors, or purchasers of the dicamba-resistant seed.

954. BASF increased sales of its older versions of dicamba despite knowledge that people sprayed those herbicides over the top of crops grown from dicamba-resistant seed in 2015, and did so for its financial gain.

955. Monsanto considered, but refused to take action to prevent those who sprayed dicamba unregistered for in-crop use in 2015 from doing so again, or refuse to sell dicamba-resistant seed to such persons, and did so for its financial gain.

956. Both Defendants designed, developed and accelerated used of the dicamba-resistant trait, and also heavily marketed and promoted purchase and use of dicamba-resistant seed, as well as use of dicamba over the top of growing crops, which they knew but at minimum should have known would result in the spraying of older versions of dicamba to the injury of susceptible non-dicamba resistant plants and crops.

957. Defendants breached their duty of care, and as a direct and proximate result, Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class were damaged.

958. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XLIV - STRICT LIABILITY (DESIGN DEFECT)**  
**(on behalf of Missouri 2016 Plaintiffs and 2016 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and XLIII, Missouri Plaintiffs sustaining dicamba damage in 2016 assert this Count XLIV for strict liability, design defect.

959. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 943-958 as though fully alleged herein.

960. Monsanto and BASF both are in the business of designing, developing, testing, manufacturing, marketing, distributing and selling agricultural products, including biotechnology and herbicide products. Both, in the course of their business, designed, developed, tested, manufactured, marketed, distributed, licensed and/or sold the Xtend Crop System consisting of dicamba-resistant trait technology, seed containing that trait, and dicamba herbicides.

961. The dicamba-resistant trait, and seed containing that trait, were designed and developed by Monsanto and BASF specifically for use with dicamba herbicide as part of a crop system in which dicamba is sprayed over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably, in the vicinity of non-dicamba resistant plants and crops susceptible to dicamba, including soybeans.

962. The dicamba-resistant trait, and seed containing that trait, was sold and licensed for sale by Monsanto.

963. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

964. In addition or in the alternative, BASF itself sold or Monsanto commercialized, manufactured, sold, licensed and distributed the dicamba-resistant trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

965. Defendants both designed, developed and accelerated use of the dicamba-resistant trait and seed containing it and both marketed and promoted the seed, and the purpose and use thereof.

966. Monsanto and BASF, both in the ordinary course of their business, placed the dicamba-resistant trait, and seed containing that trait, into commerce within Missouri.

967. Monsanto and BASF thus introduced an incomplete crop system. The very point of dicamba-resistant seed is in-crop use of dicamba. It was foreseeable, and foreseen, that farmers who purchased soybean and cotton seed containing the dicamba-resistant trait would spray dicamba over the top of those crops, during summer months and in the vicinity of susceptible non-dicamba resistant plants and crops, which they did.

968. There was, however, no dicamba herbicide marketed by Monsanto, BASF, or any other company in 2016 that could be safely used over the top of growing plants and crops.

969. All dicamba herbicides available in 2016 were older versions highly volatile and prone to drift, and substantially certain to harm susceptible non-resistant plants and crops.

970. Absent any safe dicamba herbicide, seed containing the dicamba-resistant trait and the incomplete crop system were unreasonably dangerous when put to reasonably anticipated use and in defective condition at the time of sale.

971. Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen when used for the purpose for which intended or as foreseeably may be used.

972. Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class were damaged as a direct and proximate result of such defective condition.

973. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including the Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XLV - STRICT LIABILITY (FAILURE TO WARN)**  
**(on behalf of Missouri 2016 Plaintiffs and 2016 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and XLIII-XLIV, Missouri Plaintiffs sustaining dicamba damage in 2016 assert this Count XLV for strict liability, failure to warn.

974. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 943-973 as though fully alleged herein.

975. As alleged, the dicamba-resistant trait, seed containing that trait and the incomplete crop system were defective and unreasonably dangerous at the time of sale and when put to reasonably anticipated and foreseeable use because no dicamba herbicide was available in 2016 for safe use over the top of growing plants and crops.

976. Defendants failed to warn or provide adequate warning of the defective condition of the dicamba-resistant trait, seed containing it and incomplete crop system, of which they knew or minimally should have known.

977. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the incomplete crop system were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

978. Ordinary users and consumers of the dicamba-resistant seed and incomplete crop system do not appreciate and would not expect the risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans.

979. By contrast, the dangers were foreseeable and foreseen by Defendants.

980. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of seed containing the dicamba-resistant trait and incomplete crop system.

981. Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use.

982. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including the Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XLVI - NEGLIGENT DESIGN**  
**(on behalf of Missouri 2016 Plaintiffs and 2016 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and XLIII-XLV, Missouri Plaintiffs sustaining dicamba damage in 2016 assert this Count XLVI for negligent design.

983. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 943-982 as though fully alleged herein.

984. Monsanto and BASF have a duty to provide products that do not have a defective design.

985. Monsanto and BASF failed to use ordinary care in the design of the dicamba-resistant trait and seed containing that trait, which was designed, developed, marketed and sold specifically for the purpose of in-crop use of dicamba.

986. The dicamba-resistant trait, seed containing it and the incomplete crop system were defective and unreasonably dangerous due to the lack of any safe dicamba herbicide to be used in conjunction therewith.

987. It was foreseeable, and foreseen, that farmers who purchased dicamba-resistant seed would spray older versions of dicamba over the top of the growing crops, and such use was reasonably anticipated.

988. Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class were damaged as a direct and proximate result of Defendants' negligence in design.

989. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including the Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XLVII - NEGLIGENT FAILURE TO WARN**  
**(on behalf of Missouri 2016 Plaintiffs and 2016 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and XLIII-XLVI, Missouri Plaintiffs sustaining dicamba damage in 2016 assert this Count XLVII for negligent failure to warn.

990. Missouri 2016 Plaintiffs incorporate by reference Paragraphs 1-382 and 943-989 as though fully alleged herein.

991. Both Defendants have a duty to adequately warn of the defective condition and risk of harm from the dicamba-resistant trait, seed containing that trait, and incomplete crop system.

992. As alleged, soybean and cotton seed containing the dicamba-resistant trait was defective and unreasonably dangerous at the time of sale. The trait, seed and incomplete crop system were unreasonably dangerous when put to reasonably anticipated use because no safe dicamba herbicide was available in 2016.

993. The dangers were foreseeable, and foreseen, by Monsanto and BASF.

994. Defendants failed to use ordinary care by not warning or adequately warning of the defective condition and dangers of the dicamba-resistant trait, seed, and incomplete crop system in breach of their duty, and as a direct and proximate result, Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class were damaged.

995. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including the Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XLVIII - NEGLIGENT TRAINING**  
**(on behalf of Missouri 2016 Plaintiffs and 2016 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and XLIII-XLVII, Missouri Plaintiffs sustaining dicamba damage in 2016 assert this Count XLVIII for negligent training.

996. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 943-995 as though fully alleged herein.

997. Monsanto and BASF had a duty to provide reasonable and adequate instruction and training with respect to the conditions and methods of safe use of their products when danger in use of the product is reasonably foreseeable.

998. It was foreseeable to, and foreseen by, Monsanto and BASF that persons purchasing dicamba-resistant seed would spray older versions of dicamba over the top of crops grown therefrom, including versions sold by BASF. Monsanto representatives affirmatively encouraged and instructed such persons to do so.

999. The dangers to non-resistant plants and crops from such foreseeable use of dicamba herbicide was foreseeable to and foreseen by Monsanto and BASF.

1000. Reasonable and adequate instruction was not provided to Defendants' employees, agents, licensees or distributors, or purchasers of dicamba-resistant seed who foreseeably sprayed older versions of dicamba.

1001. In fact, Monsanto deliberately decided not to train until the EPA released final labels for XtendiMax and Engenia.

1002. Defendants failed to use ordinary care in providing adequate instruction and training in breach of their duty and as a direct and proximate result, Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class were damaged.

1003. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including the Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XLIX - TRESPASS**  
**(on behalf of Missouri 2016 Plaintiffs and 2016 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and XLIII-XLVIII, Missouri Plaintiffs sustaining dicamba damage in 2016 assert this Count XLIX for trespass.

1004. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 943-1003 as though fully alleged herein.

1005. Monsanto and BASF intentionally designed, developed, promoted marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

1006. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide as part of an integrated system to control weeds.

1007. Monsanto and BASF, or Monsanto for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops, but that dicamba had and would move off target onto land and growing crops without permission of rightful owners and possessors, including Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class.

1008. Monsanto and BASF both knew that growers had and would spray older versions of dicamba in 2016 over the top of crops grown with dicamba-resistant seed.

1009. While publicly discouraging use of older versions of dicamba, Monsanto representatives intentionally encouraged farmers to, and directed them how to, spray such dicamba over the top of their dicamba-resistant crops.

1010. BASF also actively encouraged and promoted use of older versions of dicamba, increasing sales thereof with knowledge that persons had sprayed dicamba herbicides not registered for in-crop use in 2015 and 2016.

1011. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class have possession and without their permission.

1012. Monsanto and BASF knew that such intrusion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

1013. In addition, both Defendants promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

1014. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

1015. Such invasion interfered with the right of possession of Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class and caused substantial damage to their property.

1016. As a direct and proximate result, Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class were damaged.

1017. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Missouri 2016 Plaintiffs and other members of the 2016 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT L - STRICT LIABILITY (ULTRAHAZARDOUS)  
(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Count I, Missouri Plaintiffs sustaining dicamba damage in 2017 assert this Count L for ultrahazardous activity.

1018. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1019. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

1020. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

1021. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it. BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

1022. BASF provided a dicamba formulation to Monsanto, who added VaporGrip Technology and provided it to others, and both Defendants manufactured and sold dicamba herbicides for use over the top of growing crops.

1023. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

1024. Both Defendants actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in Missouri.

1025. Both Monsanto and BASF heavily marketed and promoted the Xtend Crop System as safe when it was not.

1026. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

1027. The risk of harm cannot be eliminated with exercise of reasonable care.

1028. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

1029. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

1030. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

1031. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

1032. Temperature inversions occur frequently in Missouri. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

1033. Defendants' design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in Missouri given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in Missouri.

1034. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

1035. A crop system entailing application of dicamba over the top of crops grown from dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

1036. As a result of Defendants' activities, Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

1037. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including the Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LI - GENERAL NEGLIGENCE**  
**(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Count I, but in the alternative to Count L, Missouri Plaintiffs sustaining dicamba damage in 2017 assert this Count LI for general negligence.

1038. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1039. Producers with non-resistant plants and crops susceptible to dicamba, including soybeans, are the most likely to be harmed by Defendants' irresponsible conduct.

1040. Monsanto and BASF knew, but at minimum should have known, that development, commercialization, promotion, sale, and licensing of the dicamba-resistant trait would result in significant use of dicamba herbicide over the top of crops grown from seed containing that trait. The trait and seed were developed and sold for this very purpose, which both Monsanto and BASF intended and anticipated.

1041. Monsanto and BASF further developed, marketed, sold, and licensed new supposedly "low" volatility formulations of dicamba specifically for use with seed containing the dicamba-resistant trait.

1042. As Monsanto and BASF knew, even supposed "low-volatility" dicamba herbicides are still volatile, prone to drift, and at high risk of moving off target and damaging susceptible non-resistant plants and crops.

1043. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1044. To the extent damage resulted from drift and otherwise, it was foreseeable, and foreseen, by Monsanto and BASF that applicators could not or would not adhere to label instructions.

1045. To the extent some applicators used older versions of dicamba, it was foreseeable, and foreseen, by Monsanto and BASF that they would do so.

1046. Monsanto and BASF knew, but at bare minimum should have known, that conditions in areas, including Missouri, such as temperature inversions, predictably high dicamba

usage, and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or physical drift.

1047. Monsanto and BASF both designed, developed, accelerated, and aggressively marketed and sold the Xtend Crop System knowing that it could not be safely used and carries significant and serious risk to susceptible non-dicamba resistant plants and crops, including soybeans.

1048. It was foreseeable, and foreseen, that in-crop use of dicamba would result in damage to susceptible, non-resistant plants and crops, especially soybeans.

1049. It was foreseeable, and foreseen, that injury to producers of susceptible non-resistant crops such as Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class would occur.

1050. Monsanto and BASF have a duty of reasonable care to avoid foreseeable harm, and certainly a duty to not create, or continue, foreseeable risk of harm to Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class.

1051. That duty is to exercise reasonable care and caution commensurate with the dangers to be reasonably anticipated under the circumstances.

1052. Rather than exercise even ordinary care, Monsanto and BASF did just the opposite.

1053. Monsanto widely sold, licensed and disseminated a dicamba-resistant trait specifically intended for use with dicamba applied during summer months over the top of growing plants, to the foreseeable injury of susceptible non-dicamba resistant plants and crops, especially soybeans.

1054. As partner, joint venturer or joint enterprise with Monsanto, BASF is jointly liable.

1055. In addition or in the alternative, BASF entered into one or more agreements with Monsanto to jointly design, develop and commercialize that trait and seed containing it. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the dicamba-resistant trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

1056. BASF and Monsanto both designed, developed and accelerated the Xtend Crop System, made up of seed containing the dicamba-resistant trait and dicamba herbicide.

1057. BASF supplied and/or licensed a dicamba formulation to Monsanto, and by extension others such as DuPont, and both Defendants manufactured and sold dicamba herbicide which they intended and knew would be used over the top of soybean and cotton grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System, to the foreseeable injury of non-resistant plants and crops.

1058. Defendants also failed to adequately test the system with new formulations of dicamba. Monsanto affirmatively refused independent testing for volatility because it did not want to jeopardize federal registration.

1059. Defendants also expressly undertook, but failed, to provide adequate education, training and instruction to users of the Xtend Crop System which they did or should have recognized as minimally necessary for the protection of persons including producers of susceptible non-dicamba resistant plants and crops, including soybeans, increasing the risk of harm to Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class.

1060. Defendants also aggressively and misleadingly promoted the Xtend Crop System, dicamba-resistant seed and in-crop use of dicamba as safe when it was not, knowing and intending that such promotion would increase use of the system, and correspondingly, the risk of harm.

1061. Monsanto also considered but refused to take action to prevent those who sprayed dicamba unregistered for in-crop use in 2015 and 2016 from doing so again, or refuse to sell dicamba-resistant seed to such persons, and did so for its own economic gain.

1062. Defendants designed, developed, accelerated, sold, promoted, and disseminated the dicamba-resistant trait specifically for use with inadequately tested, volatile and drift-prone herbicide seriously dangerous to susceptible non-resistant crops, and in a manner most likely to create and increase risk and cause damage, including but not limited to aggressive and misleading marketing, licensing, and unlimited release of a much-touted crop system into areas such as Missouri with significant glyphosate-resistant weeds, foreseeably heavy use of dicamba under circumstances including common occurrence of inversions, inadequately trained and uncertified applicators, inadequate warnings, and heavy planting of highly susceptible crops such as soybeans, creating high probability of off-target movement and damage.

1063. Defendants breached their duty of care.

1064. As a direct and proximate result, Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class were damaged.

1065. The conduct of Monsanto and BASF showed a complete indifference to or conscious disregard of the rights of others, including the Missouri 2017 Plaintiffs and other members of the 2017 Missouri State Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LII - STRICT LIABILITY (DESIGN DEFECT)**  
**(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and LI, but in the alternative to Count L, Missouri Plaintiffs sustaining dicamba damage in 2017 assert this Count LII for strict liability, design defect.

1066. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1039-1065 as though fully alleged herein.

1067. Monsanto and BASF both are in the business of designing, developing, testing, manufacturing, marketing, distributing and selling agricultural products, including biotechnology and herbicide products. Both, in the course of their business, designed, developed, tested, manufactured, marketed, distributed, licensed and/or sold the Xtend Crop System consisting of dicamba-resistant trait technology and seed containing that trait, and dicamba herbicides.

1068. The dicamba-resistant trait, and seed containing that trait, were designed and developed by Monsanto and BASF specifically for use with dicamba herbicide as part of a crop system in which dicamba is sprayed over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably, in the vicinity of non-dicamba resistant plants and crops susceptible to dicamba, including soybeans.

1069. Monsanto and BASF further designed, developed, sold, and licensed new supposedly “low” volatility formulations of dicamba specifically for use with the dicamba-resistant trait and seed containing that trait.

1070. The dicamba-resistant trait and seed containing that trait, was manufactured, sold and licensed for sale by Monsanto.

1071. As partner, joint venture or joint enterprise with Monsanto, BASF is jointly liable.

1072. In addition or in the alternative, BASF itself sold or Monsanto commercialized, manufactured, sold, licensed and distributed the dicamba-resistant trait in soybean and cotton seed for itself and as agent for BASF, which shared profits therefrom.

1073. Monsanto and BASF both designed and developed the Xtend Crop System, BASF also designed a dicamba herbicide formulation supplied and/or licensed to Monsanto, who added

“VaporGrip Technology” and supplied the same to others. Both Defendants manufactured and sold dicamba herbicide for in-crop use, and actively marketed and promoted the Xtend Crop System, dicamba-resistant seed, and in-crop use of dicamba, all for commercialization and to the benefit of both Monsanto and BASF.

1074. Monsanto and BASF both in the ordinary course of their business placed the dicamba-resistant seed trait, seed containing that trait, and Xtend Crop System, into commerce within Missouri.

1075. Defendants designed, manufactured, distributed, marketed, promoted, and sold the dicamba-resistant trait and seed containing that trait for the express and intended purpose of in-crop use of dicamba herbicide as an integrated crop system.

1076. The Xtend Crop System was and is unsafe for the anticipated, foreseeable use by Xtend Crop System users of spraying dicamba herbicide over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably in the vicinity of susceptible non-dicamba resistant crops including soybeans.

1077. The dicamba-resistant trait, seed containing that trait and the Xtend Crop System, as designed and used in intended and foreseeable manner was unreasonably dangerous.

1078. All dicamba currently on the market, including the new “low volatility” versions are still volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

1079. The majority of damage in 2017 was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1080. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1081. To the extent applicators used older versions of dicamba, it was foreseeable to, and foreseen, that they would do so.

1082. The dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were used as reasonably anticipated, and as designed and so used, were and are in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was foreseeable.

1083. Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen when used for the purpose for which intended or as foreseeably may be used.

1084. As a direct and proximate result of the defective condition of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class were damaged.

1085. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LIII - STRICT LIABILITY (FAILURE TO WARN)**  
**(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and LI-LII, but in the alternative to Count L, Missouri Plaintiffs sustaining damage in 2017 assert this Count LIII for strict liability, failure to warn.

1086. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1039-1085 as though fully alleged herein.

1087. As alleged, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in anticipated and foreseeable manner was and is unreasonably dangerous and defective at the time of sale.

1088. Defendants failed to warn or to provide adequate warning of such defective condition, of which they knew or minimally should have known.

1089. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

1090. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of the Xtend Crop System and its components.

1091. Ordinary users and consumers of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans. Indeed, Monsanto and BASF both represented that the Xtend Crop System was safe and concealed the risks.

1092. Adequate warning and instruction were not provided by label or otherwise.

1093. Moreover, the labels were false, misleading and failed to contain warnings or instructions adequate to protect, or prevent harm to, the environment including susceptible non-resistant plants and crops, including soybeans.

1094. Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use

1095. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LIV - NEGLIGENT DESIGN**  
**(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and LI-LIII, but in the alternative to Count L, Missouri Plaintiffs sustaining damage in 2017 assert this Count LIV for negligent design.

1096. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1039-1095 as though fully alleged herein.

1097. Monsanto and BASF have a duty to provide products that do not have a defective design.

1098. Defendants failed to use ordinary care in designing the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, which are unreasonably dangerous and defective, which Defendants knew or at minimum should have known.

1099. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1100. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1101. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1102. As a direct and proximate result of Defendants' failure to use reasonable care in design of dicamba-resistant trait, seed containing that trait, and/or Xtend Crop System, Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class were damaged.

1103. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Missouri 2017 Plaintiffs and members of the Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LV - NEGLIGENT FAILURE TO WARN**  
**(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and LI-LIV, but in the alternative to Count L, Missouri Plaintiffs sustaining damage in 2017 assert this Count LV for negligent failure to warn.

1104. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1039-1103 as though fully alleged herein.

1105. Monsanto and BASF have a duty to adequately warn of the defective condition and risk of harm from the dicamba-resistant trait, seed containing that trait and Xtend Crop System.

1106. The dangers of the Xtend Crop System and its components were foreseeable, and foreseen, by Monsanto and BASF.

1107. Both Defendants failed to exercise reasonable care to warn and adequately warn of the risk of harm. To the contrary, both misrepresented and concealed the dangers.

1108. Defendants breached their duty and as a direct and proximate result, Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class were damaged.

1109. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LVI - NEGLIGENT TRAINING**  
**(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and LI-LV, but in the alternative to Count L, Missouri Plaintiffs sustaining damage in 2017 assert this Count LVI for negligent training.

1110. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1039-1109 as though fully alleged herein.

1111. Monsanto and BASF have a duty to provide adequate instruction and training for the safe use of their products.

1112. Monsanto and BASF failed to provide adequate training and instruction to their employees, agents, licensees or distributors or to users of the Xtend Crop System.

1113. Adequate instruction was not provided by education or training, and none of the labels contain instruction for use that would, if followed, prevent harm to the environment and susceptible, non-resistant plants and crops including soybeans.

1114. In addition to duty imposed by law, Monsanto and BASF each specifically undertook to render services to growers who used the Xtend Crop System, including the provision of stewardship tools, education and training, which both recognized to be necessary for minimal protection of third persons or their things, including Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class.

1115. Monsanto and BASF both failed to exercise reasonable care in this undertaking, which increased the risk of harm to Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class.

1116. Defendants breached their duty and as a direct and proximate result, Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class were damaged.

1117. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LVII - TRESPASS**  
**(on behalf of Missouri 2017 Plaintiffs and 2017 Missouri Soybean Producers Class)**

In addition or in the alternative to Counts I and LI-LVI but in the alternative to Count L, Missouri Plaintiffs sustaining damage in 2017 assert this Count LVII for trespass.

1118. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1039-1117 as though fully alleged herein.

1119. Monsanto and BASF intentionally designed, developed, promoted, marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

1120. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide as part of the Xtend Crop System with dicamba-resistant seed.

1121. Monsanto and BASF, or Monsanto for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops, but that dicamba had and would move off target onto land and growing crops without permission of rightful owners and possessors, including Missouri 2017 Plaintiffs and other members of the 2017 Missouri Soybean Producers Class.

1122. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which 2017 Missouri Plaintiffs/Class Members have possession and without their permission.

1123. Monsanto and BASF knew that such intrusion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

1124. In addition, both Defendants promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

1125. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

1126. Such invasion interfered with Missouri 2017 Plaintiffs' and other 2017 Missouri Soybean Producer Class members' right of possession and caused substantial damage to their property.

1127. As a direct and proximate result, Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class were damaged.

1128. Each Defendant's conduct showed a complete indifference to or conscious disregard of the rights of others, including Missouri Plaintiffs and other members of the 2017 Missouri Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LVIII - VIOLATION OF MISSOURI CROP PROTECTION STATUTES  
(on behalf of all Missouri Plaintiffs and the Missouri Soybean Producers Classes)**

In addition or in the alternative to Counts I and LI-LVII but in the alternative to Count L, Missouri Plaintiffs assert this Count LVIII for violation of Missouri crop protection statutes.

1129. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1039-1128 as though fully alleged herein.

1130. Pursuant to Mo. Rev. Stat. § 569.132.2, it is a violation for any person to intentionally cause the loss of any crop.

1131. Pursuant to Mo. Rev. Stat. § 569.132.4, “[a]ny person who has been damaged by a violation of this section shall have a civil cause of action under section 537.353.”

1132. Pursuant to Mo. Rev. Stat. § 537.353, “[a]ny person or entity who knowingly damages or destroys any field crop product that is grown for personal or commercial purposes . . . shall be liable for double damages pursuant to this section.” In addition, the court may award court costs, including reasonable attorneys’ fees. *Id.*

1133. As alleged above, Monsanto and BASF did cause loss of and damage to field crops produced by all Missouri Plaintiffs and other members of the Missouri Soybean Producers Classes grown for commercial purposes, who have been damaged thereby.

1134. As alleged above, Monsanto and BASF did so knowingly and intentionally for the purpose of escalating purchases of dicamba-resistant seed and herbicide for their own financial gain.

1135. Accordingly, Missouri Plaintiffs and other members of the Missouri Soybean Producers Classes are entitled to double damages pursuant to statute.

1136. Each Defendant’s conduct also showed a complete indifference to or conscious disregard of the rights of others, including Missouri Plaintiffs and other members of the Missouri Soybean Producers Classes and punitive damages are thus warranted.

1137. At minimum, Monsanto and BASF negligently damaged field crops produced by Missouri Plaintiffs and other members of the Missouri Soybean Producers Classes and as such, are liable for compensatory damages pursuant to Section 537.353.2.

**COUNT LIX - CIVIL CONSPIRACY**  
**(on behalf of all Missouri Plaintiffs and the Missouri Soybean Producers Classes)**

In addition or in the alternative to Counts I and L-LVIII, all Missouri Plaintiffs assert this Count LIX for civil conspiracy.

1138. Missouri Plaintiffs incorporate by reference Paragraphs 1-382 and 1018-1137 as though fully alleged herein.

1139. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

1140. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba damage at the expense of producers like Missouri Plaintiffs and other members of the Missouri Soybean Producers Classes, whose non-resistant crops were damaged.

1141. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

1142. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

1143. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

1144. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

1145. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

1146. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

1147. Defendants also knew that the dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

1148. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of dicamba-resistant seed prior to any dicamba registered for in-crop use, with knowledge, intent and certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybeans and/or cotton grown from dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

1149. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

1150. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

1151. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops

and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

1152. Defendants conspired to and did inadequately educate, train or instruct on safe use of the Xtend Crop System, notwithstanding that each clearly knew the importance thereof to have even minimal chance of safe use, also in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

1153. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including plaintiffs' crops, in Missouri and other states.

1154. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

1155. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

1156. Defendants' unlawful actions resulted in damages to Missouri Plaintiffs and other members of the Missouri Soybean Producers Classes, who were harmed in the ways and manners described above.

**COUNT LX - STRICT LIABILITY (ULTRAHAZARDOUS)  
(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Count I, Nebraska Plaintiffs assert this Count LX for strict liability, ultrahazardous activity.

1157. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1158. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

1159. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

1160. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it. BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

1161. BASF provided a dicamba formulation to Monsanto, who added VaporGrip Technology and provided it to others, and both Defendants manufactured and sold dicamba herbicides for use over the top of growing crops.

1162. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

1163. Both Defendants actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in Nebraska.

1164. Both Monsanto and BASF heavily marketed and promoted the Xtend Crop System as safe when it was not.

1165. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

1166. The risk of harm cannot be eliminated with exercise of reasonable care.

1167. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

1168. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

1169. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

1170. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

1171. Temperature inversions occur frequently in Nebraska. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

1172. Defendants’ design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in Nebraska given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in Nebraska.

1173. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

1174. A crop system entailing application of dicamba over the top of crops grown with dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

1175. As a result of Defendants' activities, Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

**COUNT LXI - GENERAL NEGLIGENCE**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Count I, but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXI for general negligence.

1176. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1177. Producers with non-resistant plants and crops susceptible to dicamba, including soybeans, are the most likely to be harmed by Defendants' irresponsible conduct.

1178. Monsanto and BASF each have a duty to exercise reasonable care when its conduct creates a risk of physical harm, which it did here.

1179. Monsanto widely sold, licensed and disseminated a dicamba-resistant trait specifically intended for use with dicamba applied during summer months over the top of crops grown from seed containing that trait, to the foreseeable injury of susceptible non-dicamba resistant plants and crops, especially soybeans.

1180. As partner, joint venturer or joint enterprise with Monsanto, BASF is jointly liable.

1181. In addition or in the alternative, BASF entered into one or more agreements with Monsanto to jointly design, develop and commercialize that trait and seed containing it. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the dicamba-resistant

trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

1182. BASF and Monsanto both designed, developed and accelerated the Xtend Crop System, made up of seed containing the dicamba-resistant trait and dicamba herbicide.

1183. BASF supplied and/or licensed a dicamba formulation to Monsanto and by extension others such as DuPont. Both Defendants manufactured and sold dicamba herbicide for use over the top of soybean and cotton grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System, to the foreseeable injury of non-resistant plants and crops.

1184. Monsanto and BASF knew, but at minimum should have known, that development, commercialization, promotion, sale and licensing of the dicamba-resistant trait in cotton and soybean would result in significant use of dicamba herbicide over the top of crops grown from seed containing that trait. The trait and seed were developed and sold for this very purpose, which both Monsanto and BASF intended and anticipated.

1185. As Monsanto and BASF both knew, even supposed “low-volatility” dicamba herbicides are still volatile and very prone to drift, in either event creating high risk of moving off target and damaging susceptible non-resistant plants and crops.

1186. Not only did Defendants develop, accelerate, and improvidently place their dangerous products into commerce in Nebraska, they otherwise acted and failed to act in multiple ways all of which created and increased the risk of harm.

1187. Among other things, Defendants both aggressively and misleadingly promoted the Xtend Crops System as safe when it was not, knowing and intending that such promotion would increase in-crop use of dicamba, and correspondingly, the risk of harm.

1188. Defendants also failed to adequately test the system with new formulations of dicamba. Monsanto affirmatively refused independent testing for volatility because it did not want to jeopardize federal registration.

1189. Defendants also expressly undertook, but failed, to provide adequate education, training and instruction to users of the Xtend Crop System which they did or should have recognized as minimally necessary for the protection of persons including producers of susceptible non-dicamba resistant plants and crops, including soybeans, increasing the risk of harm to Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class.

1190. Monsanto also considered but refused to take action to prevent those who sprayed dicamba unregistered for in-crop use in 2015 and 2016 from doing so again, or refuse to sell dicamba-resistant seed to such persons, and did so for its own economic gain.

1191. Defendants designed, developed, accelerated, sold, promoted, and disseminated the dicamba-resistant trait specifically for use with inadequately tested, volatile and drift-prone herbicide seriously dangerous to susceptible non-resistant crops, and in a manner most likely to create and increase risk and cause damage, including but not limited to aggressive and misleading marketing, licensing, and unlimited release of a much-touted crop system into areas such as Nebraska with significant glyphosate-resistant weeds, foreseeably heavy use of dicamba under circumstances including common occurrence of inversions, inadequately trained and uncertified applicators, lack of adequate warnings, and heavy planting of highly susceptible crops such as soybeans, creating high probability of off-target movement and damage.

1192. It was foreseeable to, and foreseen by, Defendants that in-crop use of dicamba would result in damage to non-resistant plants and crops, especially soybeans.

1193. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1194. To the extent damage resulted from drift and otherwise, it was foreseeable, and foreseen, by Monsanto and BASF that applicators could not or would not adhere to label instructions.

1195. To the extent some applicators used older versions of dicamba, it was foreseeable, and foreseen, by Monsanto and BASF that they would do so.

1196. Monsanto and BASF knew, but at minimum should have known, that conditions in areas, including Nebraska, such as temperature inversions, predictably high dicamba usage, and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or drift.

1197. It was foreseeable, and foreseen, that injury to producers of susceptible non-resistant crops such as Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class would occur.

1198. Defendants breached their duty of care, and as a direct and proximate result, Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class were damaged.

**COUNT LXII - STRICT LIABILITY (DESIGN DEFECT)**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI, but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXII for strict liability, design defect.

1199. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1198 as though fully alleged herein.

1200. Monsanto and BASF both are in the business of designing, developing, testing, manufacturing, marketing, distributing and selling agricultural products, including biotechnology

and herbicide products. Both, in the course of their business, designed, developed, tested, manufactured, marketed, distributed, licensed and/or sold the Xtend Crop System consisting of dicamba-resistant trait technology and seed containing that trait, and dicamba herbicides.

1201. The dicamba-resistant trait, and seed containing that trait, was designed and developed by Monsanto and BASF specifically for use with dicamba herbicide as part of a crop system in which dicamba is sprayed over the top of growing plants in summer months and foreseeably, in the vicinity of non-dicamba resistant plants and crops susceptible to dicamba, including soybeans.

1202. Monsanto and BASF further designed, developed, licensed, manufactured and sold supposedly new “low” volatility formulations of dicamba specifically for use with the dicamba-resistant trait and seed containing that trait.

1203. The dicamba-resistant trait, and seed containing that trait, was manufactured, sold and licensed for sale by Monsanto.

1204. As partner, joint venture or joint enterprise with Monsanto, BASF is jointly liable.

1205. In addition or in the alternative, BASF itself sold or Monsanto commercialized, manufactured, sold, licensed and distributed the dicamba-resistant trait in soybean and cotton seed for itself and as agent for BASF, which shared profits therefrom.

1206. Monsanto and BASF both designed and developed the Xtend Crop System. BASF also designed a dicamba herbicide formulation supplied and/or licensed to Monsanto, who added VaporGrip Technology and supplied it to others. Both Defendants manufactured and sold dicamba herbicide for in-crop use. Both actively marketed and promoted the Xtend Crop System, dicamba-resistant seed, and in-crop use of dicamba, all for commercialization and to the benefit of both Monsanto and BASF.

1207. Monsanto and BASF both in the ordinary course of their business placed the dicamba-resistant seed trait, seed containing that trait, and Xtend Crop System, on the market in Nebraska.

1208. The dicamba-resistant trait, seed containing it, and the Xtend Crop System at the time placed on the market failed to perform as safely as an ordinary consumer would expect when used in a manner intended or reasonably foreseeable by Defendants.

1209. Ordinary users and consumers of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans. Indeed, Monsanto and BASF both represented the Xtend Crop System was safe and concealed the risks.

1210. Defendants designed, manufactured, distributed, marketed, promoted, and sold the dicamba-resistant trait and seed containing that trait for the express and intended purpose of in-crop use of dicamba herbicide as an integrated crop system.

1211. The Xtend Crop System was and is unsafe for the intended, anticipated, and foreseeable use by Xtend Crop System users of spraying dicamba herbicide over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably in the vicinity of susceptible non-dicamba resistant crops including soybeans.

1212. The dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in intended and foreseeable manner were unreasonably dangerous.

1213. All dicamba currently on the market, including the new “low-volatility” versions are still volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

1214. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1215. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1216. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1217. The dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were used as intended and reasonably anticipated, and as designed and so used, were and are in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was foreseeable.

1218. Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen when used for the purpose for which intended or as foreseeably may be used.

1219. As a direct and proximate result of the defective and unreasonably dangerous condition of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class were damaged.

**COUNT LXIII - STRICT LIABILITY (FAILURE TO WARN)**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI-LXII, but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXIII for strict liability, failure to warn.

1220. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1219 as though fully alleged herein.

1221. As alleged, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in anticipated and foreseeable manner were and are unreasonably dangerous and defective at the time of sale.

1222. Defendants failed to warn or to provide adequate warning of such defective condition, of which they knew or minimally should have known.

1223. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

1224. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of the Xtend Crop System and its components.

1225. As alleged, ordinary users and consumers of the Xtend Crop System were unaware of such dangers, which by contrast, were foreseeable and foreseen by Defendants.

1226. Adequate warning and instruction were not provided by label or otherwise.

1227. Moreover, the labels were false, misleading and failed to contain warnings or instructions adequate to protect, or prevent harm to the environment, including susceptible non-resistant plants and crops, including soybeans.

1228. Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use.

**COUNT LXIV - NEGLIGENT DESIGN**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI-LXIII, but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXIV for negligent design.

1229. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1228 as though fully alleged herein.

1230. Monsanto and BASF have a duty to use reasonable care in the design of goods to protect against unreasonable risk of harm while the goods are being used for their intended purpose or any purpose which could reasonably be expected.

1231. Defendants failed to use reasonable care in designing the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, which were and are unreasonably dangerous and defective.

1232. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1233. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1234. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1235. As a direct and proximate result of Defendants' failure to use reasonable care in design of dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class were damaged.

**COUNT LXV - NEGLIGENT FAILURE TO WARN**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI-LXIV, but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXV for negligent failure to warn.

1236. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1235 as though fully alleged herein.

1237. Monsanto and BASF have a duty to adequately warn about a risk or hazard inherent in the way their product is designed that is related to the intended uses as well as the reasonably foreseeable uses that may be made of the product it sells.

1238. The dangers of the Xtend Crop System and its components when used as intended were inherent or foreseeable, and foreseen, by Monsanto and BASF.

1239. Defendants failed to exercise reasonable care to warn and adequately warn of the dangers. To the contrary, Defendants misrepresented and concealed the danger.

1240. As a direct and proximate result of this failure, Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class were damaged.

**COUNT LXVI - BREACH OF EXPRESS WARRANTY**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI-LXV, but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXVI for breach of express warranty.

1241. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1240 as though fully alleged herein.

1242. Monsanto sold and licensed for sale the dicamba-resistant trait seed containing that trait in Nebraska.

1243. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

1244. In addition or in the alternative, Monsanto and BASF entered into one or more agreements for joint development of the dicamba-resistant trait and its commercialization. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed that trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

1245. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who added VaporGrip Technology and supplied the same to others, including DuPont, and both Defendants manufactured and sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistant trait.

1246. Monsanto and BASF each made numerous affirmations of fact as well as promises and descriptions of the Xtend Crop System and components thereof to buyers relating to the goods sold that became part of the basis of those bargains.

1247. Representations, promises, and descriptions by Monsanto include that:

- a. Xtend seed is high-yield;
- b. the Xtend Crop System would result “in better performance and safety to nearby crops;”
- c. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- d. purchasers of the Xtend Crop System could apply the new dicamba formulations over the top of plants grown with dicamba-resistant seed with “proven” application methods without damaging off-target plants and crops;
- e. VaporGrip Technology provides a “[s]tep-change reduction in volatility;”
- f. XtendiMax has a “significant reduction in volatility potential,” has “[l]ow volatility” and “[w]ill provide applicators confidence in on-target application of dicamba in combination with application requirements for successful on-target applications;”
- g. VaporGrip Technology is a “[r]evolutionary [b]reakthrough” which “significantly minimizes dicamba’s volatility potential after spraying – provides growers and applicators confidence in on target application of dicamba” and growers can “[a]pply [w]ith [c]onfidence;”
- h. the Xtend Crop System can be used in a manner that will not damage off-target plants and crops.

1248. Representations, promises, and descriptions by BASF include that:

- a. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- b. there would be “on-target herbicide application success with low volatility and drift so the herbicide stays in place;”
- c. Engenia minimizes volatility and is not “a chemistry that is dangerous;”
- d. Engenia offers “excellent . . . crop safety” and “low-volatility characteristics for improved on-target application;”
- e. the Xtend Crop System with Engenia offers at least a 70% reduction in volatility as compared to older (Clarity) formulations;
- f. Engenia is a “step-change improvement;”
- g. the Xtend Crop System would result “in better performance and safety to nearby crops;”
- h. The Xtend Crop System offers significant reduction in any secondary loss profile as compared to older dicamba formulations;
- i. advanced formulation “reduces loss from volatility.”

1249. All these affirmations, promises, and descriptions created an express warranty that the goods would conform therewith.

1250. All of these representations, promises, and descriptions were made for the purpose of, and did, induce reliance on the part of persons who purchased the Xtend Crop System.

1251. The Xtend Crop System and its components did not conform with the express warranties created.

1252. Nebraska Plaintiffs and other members of the Nebraska State Soybean Producers Class are persons who Monsanto and BASF could have expected to be affected by the dangerous Xtend Crop System and its components.

1253. As a direct and proximate result of Defendants’ breach of express warranty, Kansas Plaintiffs and other members of the Kansas Soybean Producers Class were damaged.

1254. To the extent required, Defendants received sufficient notice of their breach.

**COUNT LXVII - TRESPASS**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI-LXVI but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXVII for trespass.

1255. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1254 as though fully alleged herein.

1256. Monsanto and BASF intentionally designed, developed, promoted, marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

1257. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide as part of the Xtend Crop System with dicamba-resistant seed.

1258. Monsanto and BASF, or Monsanto for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops, but that dicamba had and would move off target onto the land and growing crops without permission of rightful owners and possessors, including Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class.

1259. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which Nebraska Plaintiffs/Class Members have possession and without their permission.

1260. Monsanto and BASF knew that such intrusion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

1261. In addition, both Defendants promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

1262. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

1263. Such invasion interfered with Nebraska Plaintiffs' and other Nebraska Soybean Producer Class members' right of possession and caused substantial damage to their property.

1264. As a direct and proximate result, Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class were damaged.

**COUNT LXVIII - NUISANCE**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI-LXVII but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXVIII for nuisance.

1265. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1264 as though fully alleged herein.

1266. The conduct of Monsanto and BASF interfered with the use and enjoyment of land by Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class, who were and are entitled to that use.

1267. Monsanto and BASF each acted for the purpose of causing an invasion of dicamba onto these Plaintiffs' and Class Members' land and crops or with knowledge that the interference was resulting or with knowledge that the interference was substantially certain to result from its conduct.

1268. The interference and resulting physical harm were substantial, constitute an unreasonable interference with these Plaintiffs' and Class Members' use and enjoyment of the land, and caused substantial damage to their property.

**COUNT LXIX - VIOLATION OF NEBRASKA CONSUMER PROTECTION ACT  
(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LXI-LXVIII, but in the alternative to Count LX, Nebraska Plaintiffs assert this Count LXIX for violation of the Nebraska Consumer Protection Act.

1269. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1177-1268 as though fully alleged herein.

1270. Pursuant to Neb. Rev. Stat. Ann. § 59-1602, unfair methods of competition and unfair or deceptive acts or practices in the conduct of any trade or commerce are unlawful.

1271. Pursuant to Neb. Rev. Stat. Ann. § 59-1609, “[a]ny person who is injured in his or her business or property by a violation of sections 59-1602 . . . whether such injured person dealt directly or indirectly with the defendant” may bring an action to recover damages along with, *inter alia*, the costs of suit, including reasonable attorneys’ fees.

1272. Monsanto and BASF engaged in numerous deceptive acts or practices as further detailed herein, including paragraphs 148-155, 243-44, 247-48, and 252-253 above. Defendants’ misrepresentations, descriptions, promises, and omissions were deceptive and misleading, all for the purpose of convincing farmers that the Xtend Crop System is safe when it is not, and to increase sales of dicamba-resistant seed and dicamba herbicide to Defendants’ financial gain.

1273. The acts and practices of Monsanto and BASF also were and are unfair, immoral, unethical, oppressive, or unscrupulous. Monsanto and BASF knew and at bare minimum should have known that the Xtend Crop System would result in damage to non-resistant plants and crops,

from which they would financially benefit as such damage did and does pressure farmers to purchase seed containing the dicamba-resistant trait out of self defense, while increasing profits for Defendants from licensing and sale of both seed and herbicides. Farmers should not be forced into a choice between Defendants' products and ruin to non-resistant crops.

1274. These acts or practices were in the conduct of trade or commerce and affect the people of the State of Nebraska and the public interest.

1275. Not only have Defendants' practices affected and continue to affect Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class, but many others including but not limited to: University weed scientists and departments, extension office personnel, and officials, all of whom have expended significant time and effort addressing the serious problem Defendants created; consumers of the Xtend Crop System; and agricultural interests throughout Nebraska including persons and businesses growing trees, fruits, and vegetables that also have been and continue to be damaged by exposure to dicamba. Defendants' acts and practices also will accelerate evolution of a new round of superweeds resistant to dicamba itself.

1276. Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class were injured in their business or property by Defendants' violation of Section 59-1602 and are entitled to recover as provided in Section 59-1609.

**COUNT LXX - CIVIL CONSPIRACY**  
**(on behalf of Nebraska Plaintiffs and the Nebraska Soybean Producers Class)**

In addition or in the alternative to Counts I and LX-LXIX, Nebraska Plaintiffs assert this Count LXX for civil conspiracy.

1277. Nebraska Plaintiffs incorporate by reference Paragraphs 1-382 and 1157-1276 as though fully alleged herein.

1278. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

1279. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba damage at the expense of producers like Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class, whose non-resistant crops were damaged.

1280. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

1281. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

1282. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

1283. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

1284. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

1285. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

1286. Defendants also knew that the dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

1287. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of dicamba-resistant seed prior to any dicamba registered for in-crop use, with knowledge, intent and certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybeans and/or cotton grown from dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

1288. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

1289. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

1290. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops

and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

1291. Defendants conspired to and did inadequately educate, train or instruct on safe use of the Xtend Crop System, notwithstanding that each clearly knew the importance thereof to have even minimal chance of safe use, also in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

1292. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including Plaintiffs' crops, in Nebraska and other states.

1293. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

1294. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

1295. Defendants' unlawful actions resulted in damages to Nebraska Plaintiffs and other members of the Nebraska Soybean Producers Class, who were harmed in the ways and manners described above.

**COUNT LXXI - STRICT LIABILITY (ULTRAHAZARDOUS)**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Count I, South Dakota Plaintiffs assert this Count LXXI for strict liability, ultrahazardous activity.

1296. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1297. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

1298. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

1299. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it. BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

1300. BASF provided a dicamba formulation to Monsanto, who added VaporGrip Technology and provided it to others, and both Defendants manufactured and sold dicamba herbicides for use over the top of growing crops.

1301. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

1302. Both Defendants actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in South Dakota.

1303. Both Monsanto and BASF heavily marketed and promoted the Xtend Crop System as safe when it was not.

1304. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

1305. The risk of harm cannot be eliminated with exercise of reasonable care.

1306. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

1307. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

1308. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

1309. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

1310. Temperature inversions occur frequently in South Dakota. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

1311. Defendants’ design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in South Dakota given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in South Dakota.

1312. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

1313. A crop system entailing application of dicamba over the top of crops grown from dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

1314. As a result of Defendants' activities, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

1315. The conduct of Monsanto and BASF showed a complete indifference to or wanton and reckless disregard of the rights of others, including the South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXII – GENERAL NEGLIGENCE**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Count I, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXII for general negligence.

1316. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1317. Producers with non-resistant plants and crops susceptible to dicamba, including soybeans, are the most likely to be harmed by Defendants' irresponsible conduct.

1318. Monsanto and BASF knew, but at minimum should have known, that development, commercialization, promotion, sale, and licensing of the dicamba-resistant trait would result in significant use of dicamba herbicide over the top of crops grown from seed containing that trait. The trait and seed were developed and sold for this very purpose, which both Monsanto and BASF intended and anticipated.

1319. Monsanto and BASF further developed, marketed, sold, and licensed new supposedly "low" volatility formulations of dicamba specifically for use with seed containing the dicamba-resistant trait.

1320. As Monsanto and BASF knew, even supposed “low-volatility” dicamba herbicides are still volatile, prone to drift, and at high risk of moving off target and damaging susceptible non-resistant plants and crops.

1321. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1322. To the extent damage resulted from drift and otherwise, it was foreseeable, and foreseen, by Monsanto and BASF that applicators could not or would not adhere to label instructions.

1323. To the extent some applicators used older versions of dicamba, it was foreseeable, and foreseen, by Monsanto and BASF that they would do so.

1324. Monsanto and BASF knew, but at minimum should have known, that conditions in areas, including South Dakota, such as temperature inversions, predictably high dicamba usage, and a high level of crops susceptible to dicamba, created high risk of dicamba damage whether from volatilization or drift.

1325. It was foreseeable, and foreseen, that in-crop use of dicamba would result in damage to susceptible, non-resistant plants and crops, especially soybeans.

1326. It was foreseeable, and foreseen, that injury to producers of susceptible non-resistant crops such as South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class would occur.

1327. Monsanto and BASF have a duty of reasonable care to avoid foreseeable harm, and certainly a duty to not create, or continue, foreseeable risk of harm to South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class.

1328. That duty is to exercise reasonable care and caution commensurate with the dangers to be reasonably anticipated under the circumstances.

1329. Rather than exercise even ordinary care, Monsanto and BASF did just the opposite.

1330. Monsanto widely sold, licensed and disseminated a dicamba-resistant trait specifically intended for use with dicamba applied during summer months over the top of crops grown from seed containing that trait, to the foreseeable injury of susceptible non-dicamba resistant plants and crops, especially soybeans.

1331. As partner, joint venturer or joint enterprise with Monsanto, BASF is jointly liable.

1332. In addition or in the alternative, BASF entered into one or more agreements with Monsanto to jointly design, develop and commercialize that trait and seed containing it. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the dicamba-resistant trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

1333. BASF and Monsanto both designed, developed and accelerated the Xtend Crop System, made up of seed containing the dicamba-resistant trait and dicamba herbicide.

1334. BASF supplied and/or licensed a dicamba formulation to Monsanto, and by extension others such as DuPont, and both Defendants manufactured and sold dicamba herbicide which they intended and knew would be used over the top of soybean and cotton grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System, to the foreseeable injury of non-resistant plants and crops.

1335. Defendants also failed to adequately test the system with new formulations of dicamba. Monsanto affirmatively refused independent testing for volatility because it did not want to jeopardize federal registration.

1336. Defendants also expressly undertook, but failed, to provide adequate education, training and instruction to users of the Xtend Crop System which they did or should have recognized as minimally necessary for the protection of persons including producers of susceptible non-dicamba resistant plants and crops, including soybeans, increasing the risk of harm to South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class.

1337. Defendants also aggressively and misleadingly promoted the Xtend Crop System as safe when it was not, knowing and intending that such promotion would increase in-crop use of dicamba, and correspondingly, the risk of harm.

1338. Monsanto also considered but refused to take action to prevent those who sprayed dicamba unregistered for in-crop use in 2015 and 2016 from doing so again, or refuse to sell dicamba-resistant seed to such persons, and did so for its own economic gain.

1339. Defendants designed, developed, accelerated, sold, promoted, and disseminated the dicamba-resistant trait specifically for use with inadequately tested, volatile and drift-prone herbicide seriously dangerous to susceptible non-resistant crops, and in a manner most likely to create and increase risk and cause damage, including but not limited to aggressive and misleading marketing, licensing, and unlimited release of a much-touted crop system into areas such as South Dakota with significant glyphosate-resistant weeds, foreseeably heavy use of dicamba under circumstances including common occurrence of inversions, inadequately trained and uncertified applicators, inadequate warnings, and heavy planting of highly susceptible crops such as soybeans, creating high probability of off-target movement and damage.

1340. Defendants breached their duty of care.

1341. As a direct and proximate result, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1342. The conduct of Monsanto and BASF showed a complete indifference to or wanton and reckless disregard of the rights of others, including the South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXIII - STRICT LIABILITY (DESIGN DEFECT)**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII, but in the alternative to Count LXXI, South Dakota Plaintiffs this Count LXXIII for strict liability, design defect.

1343. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1342 as though fully alleged herein.

1344. Monsanto and BASF both are in the business of designing, developing, testing, manufacturing, marketing, distributing and selling agricultural products, including biotechnology and herbicide products. Both, in the course of their business, designed, developed, tested, manufactured, marketed, distributed, licensed and/or sold the Xtend Crop System consisting of dicamba-resistant trait technology and seed containing that trait, and dicamba herbicides.

1345. The dicamba-resistant trait, and seed containing that trait, was designed and developed by Monsanto and BASF specifically for use with dicamba herbicide as part of a crop system in which dicamba is sprayed over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably, in the vicinity of non-dicamba resistant plants and crops susceptible to dicamba, including soybeans.

1346. Monsanto and BASF further designed, developed, licensed, manufactured and sold supposedly new “low” volatility formulations of dicamba specifically for use with the dicamba-resistant trait and seed containing that trait.

1347. The dicamba-resistant trait, and seed containing that trait, was manufactured, sold and licensed for sale by Monsanto.

1348. As partner, joint venture or joint enterprise with Monsanto, BASF is jointly liable.

1349. In addition or in the alternative, BASF itself sold or Monsanto commercialized, manufactured, sold, licensed and distributed the dicamba-resistant trait in soybean and cotton seed for itself and as agent for BASF, which shared profits therefrom.

1350. Monsanto and BASF both designed and developed the Xtend Crop System. BASF also designed a dicamba herbicide formulation supplied and/or licensed to Monsanto, who supplied it to others. Both Defendants manufactured and sold dicamba herbicide for in-crop use. Both actively marketed and promoted the Xtend Crop System, dicamba-resistant seed, and in-crop use of dicamba, all for commercialization and to the benefit of both Monsanto and BASF.

1351. Defendants designed, manufactured, distributed, marketed, promoted, and sold the dicamba-resistant trait and seed containing that trait for the express and intended purpose of in-crop use of dicamba herbicide as an integrated crop system.

1352. The Xtend Crop System was and is unsafe for the anticipated, foreseeable use by Xtend Crop System users of spraying dicamba herbicide over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably in the vicinity of susceptible non-dicamba resistant crops including soybeans.

1353. The dicamba-resistant trait, seed containing it, and the Xtend Crop System at the time placed on the market were dangerous beyond that which would be contemplated by the ordinary consumer with ordinary knowledge common to the community as to its characteristics and when used in a manner intended or reasonably foreseeable by Defendants.

1354. Ordinary users and consumers of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little

dicamba it takes to damage susceptible plants and crops, especially soybeans. Indeed, Monsanto and BASF both represented that the Xtend Crop System was safe and concealed the risks.

1355. The dicamba-resistant trait, seed containing that trait and the Xtend Crop System, as designed and used in intended and foreseeable manner were unreasonably dangerous.

1356. All dicamba currently on the market, including the “low-volatility” versions are still volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

1357. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1358. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1359. To the extent growers and/or applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1360. The dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were used as intended and reasonably anticipated, and as designed and so used, were and are in defective condition unreasonably dangerous at the time of sale. This is true even if dicamba application involved user error or misuse, which was foreseeable.

1361. South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen when used for the purpose for which intended or as foreseeably may be used

1362. As a direct and proximate result of the defective condition of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1363. The conduct of Monsanto and BASF showed a complete indifference to or wanton and reckless disregard of the rights of others, including the South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXIV - STRICT LIABILITY (FAILURE TO WARN)**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXIII, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXIV for strict liability, failure to warn.

1364. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1363 as though fully alleged herein.

1365. As alleged, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in anticipated and foreseeable manner were and are unreasonably dangerous and defective at the time of sale.

1366. Defendants failed to warn or to provide adequate warning of such defective condition, of which they knew or minimally should have known.

1367. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

1368. Where, as here, a manufacturer or seller has reason to anticipate that danger may result from a foreseeable use of the product and fails to give adequate warning of such danger, the product sold without adequate warning is in defective condition.

1369. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of the Xtend Crop System and its components.

1370. As alleged, ordinary users and consumers of the Xtend Crop System were unaware of such dangers, which by contrast, were foreseeable and foreseen by Defendants.

1371. Adequate warning and instruction were not provided by label or otherwise.

1372. Moreover, the labels were false, misleading and failed to contain warnings or instructions adequate to protect, or prevent harm to, the environment including susceptible non-resistant plants and crops, including soybeans.

1373. South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use.

1374. The conduct of Monsanto and BASF showed a complete indifference to or wanton and reckless disregard of the rights of others, including the South Dakota Plaintiffs and other members of the South Dakota State Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXV - NEGLIGENT DESIGN**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXIV, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXV for negligent design.

1375. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1374 as though fully alleged herein.

1376. Monsanto and BASF have a duty to use reasonable care in providing products that do not have a defective design exposing others to foreseeable risk of harm.

1377. Defendants failed to use ordinary care in designing the dicamba-resistant trait, seed containing that trait, and Xtend Crop System, which are unreasonably dangerous and defective, and have exposed others to foreseeable risk of harm.

1378. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1379. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1380. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1381. As a direct and proximate result of Defendants' failure to use reasonable care in design of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1382. The conduct of Monsanto and BASF showed a complete indifference to or wanton and reckless disregard of the rights of others, including the South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXVI - NEGLIGENT FAILURE TO WARN**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXV, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXVI for negligent failure to warn.

1383. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1382 as though fully alleged herein.

1384. Monsanto and BASF have a duty to adequately warn of the defective condition and risk of harm from the dicamba-resistant trait, seed containing that trait and the Xtend Crop System.

1385. The dangers of the Xtend Crop System and its components were foreseeable, and foreseen, by Monsanto and BASF.

1386. Defendants failed to exercise reasonable care to warn and adequately warn of the dangers. To the contrary, both misrepresented and concealed those dangers.

1387. Defendants breached their duty and as a direct and proximate result, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1388. Each Defendant's conduct showed a complete indifference to or wanton and reckless disregard of the rights of others, including South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXVII - NEGLIGENT TRAINING  
(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXVI, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXVII for negligent training.

1389. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1388 as though fully alleged herein.

1390. Monsanto and BASF have a duty to provide adequate training and instruction for safe use of their products.

1391. Monsanto and BASF failed to provide adequate training and instruction to their employees, agents, licensees or distributors, or to users of the Xtend Crop System.

1392. Adequate instruction was not provided by education or training, and none of the labels contain instruction for use that would, if followed, prevent harm to the environment including susceptible non-resistant plants and crops, including soybeans.

1393. In addition to duty imposed by law, Monsanto and BASF each specifically undertook to render services to users of the Xtend Crop System, including the provision of stewardship tools, education and training, which both recognized to be minimally necessary for

the protection of third persons or their property, including South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class.

1394. Monsanto and BASF both failed to exercise reasonable care in this undertaking, which increased the risk of harm to South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class.

1395. Defendants breached their duty and as a direct and proximate result, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1396. Each Defendant's conduct showed a complete indifference to or wanton and reckless disregard of the rights of others, including South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXVIII - BREACH OF IMPLIED WARRANTY (FITNESS)  
(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXVII, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXVIII for breach of implied warranty of fitness for particular purpose.

1397. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1396 as though fully alleged herein.

1398. Monsanto and BASF knew that the dicamba-resistant trait and seed containing that trait, would be used with dicamba herbicide applied over the top of soybean and cotton grown from dicamba-resistant seed.

1399. Monsanto manufactured, sold and licensed the dicamba-resistant trait and seed containing that trait for sale into South Dakota.

1400. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

1401. In addition or in the alternative, Monsanto and BASF entered into one or more agreements for joint development of the dicamba-resistant trait and its commercialization. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed the trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

1402. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who added VaporGrip Technology and supplied the same to others, including DuPont, and both Defendants manufactured and sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistance trait.

1403. Monsanto and BASF both marketed and promoted the trait, seed and Xtend Crop System, representing that the system was safe and could be used in a manner that would prevent off-target movement to susceptible non-dicamba resistant plants and crops.

1404. Monsanto and BASF knew that purchasers of the Xtend Crop System rely on their skill and judgment to select or furnish suitable seed and corresponding herbicide for weed control that will not damage susceptible non-dicamba resistant plants and crops.

1405. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were fit for the particular purpose of controlling weeds without harm to non-resistant plants and crops.

1406. The trait, seed and Xtend Crop System were not fit for such purpose and thus Defendants breached the implied warranty of fitness for particular purpose.

1407. South Dakota Plaintiffs and other members of the South Dakota Producers Class are people Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

1408. As a direct and proximate result of such unfitness, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1409. To the extent required, Defendants received sufficient notice of their breach.

**COUNT LXXIX - BEACH OF IMPLIED WARRANTY (MERCHANTABILITY)  
(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXVIII, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXIX for breach of the implied warranty of merchantability.

1410. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1409 as though fully alleged herein.

1411. Defendants are manufacturers, sellers and merchants of goods of the kind at issue in this case.

1412. To be merchantable, a product must be fit for the ordinary purposes for which it is used, and must be adequately labeled.

1413. Monsanto and BASF warranted that the trait, seed and Xtend Crop System was fit for the ordinary purpose of controlling weeds without harm to other susceptible non-dicamba resistant plants and crops.

1414. The trait, seed and Xtend Crop System were not fit for such purpose and were not adequately labeled and thus Monsanto and BASF breached the implied warranty of fitness of merchantability.

1415. South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class are people who Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

1416. As a direct and proximate result of such unfitness, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1417. To the extent required, Defendants received sufficient notice of their breach.

**COUNT LXXX - BREACH OF EXPRESS WARRANTY**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXIX, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXX for breach of express warranty.

1418. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1417 as though fully alleged herein.

1419. Monsanto and BASF each made affirmations of fact as well as promises and descriptions, of the Xtend Crop System and components thereof to buyers relating to the goods sold that became part of the basis of those bargains.

1420. Representations, promises, and descriptions by Monsanto include that:

- a. Xtend seed is high-yield;
- b. the Xtend Crop System would result “in better performance and safety to ‘nearby crops,’”
- c. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- d. purchasers of the Xtend Crop System could apply the new dicamba formulations over the top of plants grown with dicamba-resistant seed with “proven” application methods without damaging off-target plants and crops;
- e. VaporGrip Technology provides a “[s]tep-change reduction in volatility;”
- f. XtendiMax has a “significant reduction in volatility potential,” has “[l]ow volatility” and “[w]ill provide applicators confidence in on-target application of dicamba in combination with application requirements for successful on-target applications;”

- g. VaporGrip Technology is a “[r]evolutionary [b]reakthrough” which “significantly minimizes dicamba’s volatility potential after spraying – provides growers and applicators confidence in on target application of dicamba” and growers can “[a]pply [w]ith [c]onfidence;”
- h. the Xtend Crop System can be used in a manner that will not damage off-target plants and crops.

1421. Representations, promises, and descriptions by BASF include that:

- a. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- b. there would be “on-target herbicide application success with low volatility and drift so the herbicide stays in place;”
- c. Engenia minimizes volatility and is not “a chemistry that is dangerous;”
- d. Engenia offers “excellent . . . crop safety” and “low-volatility characteristics for improved on-target application;”
- e. the Xtend Crop System with Engenia offers at least a 70% reduction in volatility as compared to older (Clarity) formulations;
- f. Engenia is a “step-change improvement;”
- g. the Xtend Crop System would result “in better performance and safety to nearby crops;”
- h. The Xtend Crop System offers significant reduction in any secondary loss profile as compared to older dicamba formulations;
- i. advanced formulation “reduces loss from volatility.”

1422. All these affirmations, promises, and descriptions created an express warranty that the goods would conform therewith.

1423. All of these representations, promises, and descriptions were made for the purpose of, and did, induce reliance on the part of persons who purchased the Xtend Crop System.

1424. The Xtend Crop System and its components did not conform with the express warranties created.

1425. South Dakota Plaintiffs and other members of the South Dakota State Soybean Producers Class are persons who Monsanto and BASF might reasonably expect to be affected by the dangerous Xtend Crop System and its components.

1426. As a direct and proximate cause of the failure of the Xtend Crop System and its components to conform to the express warranties, the South Dakota Plaintiffs and members of the South Dakota Soybean Producers Class were damaged.

1427. To the extent required, Defendants received sufficient notice of their breach.

**COUNT LXXXI - TRESPASS**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXX, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXXI for trespass.

1428. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1427 as though fully alleged herein.

1429. Monsanto and BASF intentionally designed, developed, promoted, marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

1430. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide as part of the Xtend Crop System with dicamba-resistant seed.

1431. Monsanto and BASF, or Monsanto for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops, but that dicamba had and would move off target onto land and growing crops without permission of rightful owners

and possessors, including South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class.

1432. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which South Dakota Plaintiffs/Class Members have possession and without their permission.

1433. Monsanto and BASF knew that such intrusion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

1434. In addition, both Defendants promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

1435. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

1436. Such invasion interfered with South Dakota Plaintiffs' and other South Dakota Soybean Producer Class members' right of possession and caused substantial damage to their property.

1437. As a direct and proximate result, South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class were damaged.

1438. Each Defendant's conduct showed a complete indifference to or wanton and reckless disregard of the rights of others, including South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXXII - NUISANCE**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXII-LXXXI, but in the alternative to Count LXXI, South Dakota Plaintiffs assert this Count LXXXII for nuisance.

1439. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1317-1438 as though fully alleged herein.

1440. The conduct of Monsanto and BASF interfered with the use and enjoyment of land by South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class, who were and are entitled to that use.

1441. Monsanto and BASF each acted for the purpose of causing an invasion of dicamba onto these Plaintiffs' and Class Members' land and crops or with knowledge that the interference was resulting or with knowledge that the interference was substantially certain to result from its conduct.

1442. The interference and resulting physical harm were substantial, constitute an unreasonable interference with these Plaintiffs' and Class Members' use and enjoyment of the land, and caused substantial damage to their property.

**COUNT LXXXIII - CIVIL CONSPIRACY**  
**(on behalf of South Dakota Plaintiffs and South Dakota Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXI-LXXXII South Dakota Plaintiffs assert this Count LXXXIII for civil conspiracy.

1443. South Dakota Plaintiffs incorporate by reference Paragraphs 1-382 and 1296-1442 as though fully alleged herein.

1444. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

1445. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba damage at the expense of producers like South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Class, whose non-resistant crops were damaged.

1446. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

1447. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

1448. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

1449. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

1450. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

1451. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

1452. Defendants also knew that the dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

1453. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of dicamba-resistant seed prior to any dicamba registered for in-crop use, with knowledge, intent and certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybeans and/or cotton grown from dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

1454. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

1455. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

1456. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

1457. Defendants conspired to and did inadequately educate, train or instruct on safe use of the Xtend Crop System, notwithstanding that each clearly knew the importance thereof to have even minimal chance of safe use, also in order to and with the intent of increasing damage to non-

resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides

1458. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including Plaintiffs' crops, in South Dakota and other states.

1459. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

1460. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

1461. Defendants' unlawful actions resulted in damages to South Dakota Plaintiffs and other members of the South Dakota Soybean Producers Classes, who were harmed in the ways and manners described above.

**COUNT LXXXIV - STRICT LIABILITY (ULTRAHAZARDOUS)  
(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Count I, Tennessee Plaintiffs assert this Count LXXXIV for ultrahazardous activity.

1462. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1463. The Xtend Crop System, entailing the dicamba-resistant trait and in-crop use of dicamba herbicide, has high risk of serious harm to others, specifically, producers with susceptible non-dicamba resistant plants and crops, including soybeans.

1464. Monsanto and BASF designed, developed, accelerated, and promoted that system, entering into agreements in order to, and which did, accelerate and increase its use by further sales of seed containing the dicamba-resistant trait and dicamba herbicide for over-the-top application.

1465. Monsanto and BASF entered into one or more agreements to jointly design, develop, accelerate, commercialize, and sell the dicamba-resistant trait and seed containing it. BASF itself engaged in such activities or Monsanto did so on behalf of itself and as agent for BASF, who shares in profits therefrom.

1466. BASF provided a dicamba formulation to Monsanto, who added VaporGrip Technology and provided it to others, and both Defendants manufactured and sold dicamba herbicides for use over the top of growing crops.

1467. Monsanto and BASF jointly designed, developed, accelerated, marketed and promoted the Xtend Crop System made up of seed containing the dicamba-resistant trait and dicamba herbicide.

1468. Both Defendants actively encouraged use of dicamba herbicides over the top of crops grown from seed containing the dicamba-resistant trait, all as part of the Xtend Crop System in Tennessee.

1469. Both Monsanto and BASF heavily marketed and promoted the Xtend Crop System as safe when it was not.

1470. The likelihood of serious harm to susceptible non-resistant plants and crops from exposure to dicamba is great, particularly for soybeans which are especially sensitive to dicamba even at very low levels.

1471. The risk of harm cannot be eliminated with exercise of reasonable care.

1472. All dicamba formulations currently on the market, including the supposed “low volatility” versions, can and do volatilize after application and even when applied properly.

1473. In addition, the instructions for use do not allow application in real-world conditions so as to eliminate the risk of harm from drift.

1474. Weather conditions, including high temperature, wind, rain, and temperature inversions all contribute to the risk.

1475. The risk also increases based on the amount of dicamba sprayed, as when dicamba remains suspended in the air, loads the atmosphere, and can travel significant distances.

1476. Temperature inversions occur frequently in Tennessee. There also is a high level of glyphosate-resistant weeds, and high concentration of susceptible plants and crops not resistant to dicamba, including soybeans.

1477. Defendants’ design, development, promotion, licensing, and sale of the dicamba-resistant trait in cotton and soybean seed and the Xtend Crop System, was and is inappropriate in Tennessee given factors including foreseeably high usage of dicamba, as well as high levels of crops, including soybeans, particularly susceptible to off-target damage. All dicamba on the market is so dangerous to non-resistant plants and crops, especially soybeans, as to be unsafe and unusually dangerous for in-crop use in Tennessee.

1478. The value of a dicamba-based crop system to the community is not outweighed by its dangerous attributes.

1479. A crop system entailing application of dicamba over the top of crops grown from dicamba-resistant seed is not a matter of common usage, but to the contrary, is new.

1480. As a result of Defendants' activities, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were harmed from exposure to dicamba and loss of yield, which is the kind of harm the possibility of which makes the activity abnormally dangerous.

1481. Defendants acted intentionally, fraudulently, maliciously, or recklessly with conscious disregard for the substantial and unjustifiable risk of injury or damage to others including Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXXV - STRICT LIABILITY (DESIGN DEFECT)**  
**(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Count I, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count LXXXV for strict liability, design defect.

1482. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 as though fully alleged herein.

1483. Pursuant to T.C.A. § 29-28-101, *et seq.*, a manufacturer or seller of a product is liable for harm to another person or his property if: (1) engaged in the business of designing, fabricating, producing, compounding, processing, assembling, selling or distributing the product; (2) the product was at the time it left its control in a defective condition and/or was unreasonably dangerous; and (3) was a proximate cause of the harm to person or to property.

1484. A manufacturer includes a "designer, fabricator, producer, compounder, processor or assembler of any product or its component parts." T.C.A. § 29-28-102.

1485. A "seller" includes "a retailer, wholesaler, or distributor, and means any individual or entity engaged in the business of selling a product, whether such sale is for resale, or for use or consumption." *Id.*

1486. A product is in defective condition when it is “unsafe for normal or anticipatable handling and consumption.” *Id.*

1487. A product is unreasonably dangerous when it is dangerous “to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics, or that the product because of its dangerous condition would not be put on the market by a reasonably prudent manufacturer or seller, assuming that the manufacturer or seller knew of its dangerous condition.” *Id.*

1488. Monsanto and BASF both are in the business of manufacturing, selling and otherwise distributing agricultural products, including the dicamba-resistant trait, seed containing that trait, and dicamba herbicides.

1489. Monsanto and BASF have a partnership, joint venture and joint enterprise for the Xtend Crop System consisting of the dicamba-resistant trait, seed containing it, and dicamba herbicide.

1490. The dicamba-resistant trait was designed, sold, and distributed specifically for intended use of dicamba herbicide sprayed during summer months over the top of crops grown from seed containing that trait. Correspondingly, dicamba herbicide for in-crop use was designed, sold and distributed specifically for crops grown from seed containing the dicamba-resistant trait.

1491. The dicamba-resistant trait, and seed containing that trait, was manufactured, sold and licensed for sale by Monsanto.

1492. As partner, joint venture or joint enterprise with Monsanto, BASF is jointly liable.

1493. In addition or in the alternative, BASF itself sold or Monsanto commercialized, manufactured, sold, licensed and distributed the dicamba-resistant trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

1494. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who added VaporGrip Technology and supplied the same to others, including DuPont, and both manufactured and sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistant trait.

1495. Monsanto and BASF each is engaged in the business of manufacturing, selling and otherwise distributing the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System and is a product seller and manufacturer for purposes of Tenn. Code Ann. § 29-28-102.

1496. The Xtend Crop System was and is unsafe for the anticipated, foreseeable use of spraying dicamba herbicide over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably in the vicinity of susceptible non-dicamba resistant crops including soybeans.

1497. All dicamba currently on the market, including the new “low-volatility” versions, is volatile and prone to drift, in both events moving from application site to damage non-resistant plants and crops, including soybeans.

1498. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1499. To the extent damage resulted from drift and otherwise, it was foreseeable and indeed foreseen that applicators could not or would not adhere to label instructions.

1500. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1501. The dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were used as reasonably anticipated, and as designed and so used, were and are in defective

condition at the time of sale. This is true even if dicamba application involved user error or misuse, which was foreseeable.

1502. The trait, seed and Xtend Crop System also were and are unreasonably dangerous when put to ordinary and intended use, reasonably foreseeable and actually foreseen by Monsanto and BASF as highly likely to result in injury, and to an extent beyond that which would be contemplated by an ordinary consumer with ordinary knowledge as to their characteristics.

1503. Ordinary users and consumers of the Xtend Crop System do not appreciate and would not expect its risks, including the likelihood and dynamics of volatilization, or how little dicamba it takes to damage susceptible non-resistant plants and crops, especially soybeans.

1504. Moreover, Monsanto and BASF continuously and heavily promoted and represented that the Xtend Crop System is safe, misrepresenting and concealing its dangers, creating expectations that the Xtend Crop System would be reasonably safe.

1505. In addition or in the alternative, the seed and system would not be put on the market by a reasonably prudent manufacturer or seller.

1506. Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class are persons to whom injury from a defective product was reasonably foreseen when used for the purpose for which intended or as foreseeably may be used.

1507. As a direct and proximate result of the defective and/or unreasonably dangerous condition of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1508. Defendants acted intentionally, fraudulently, maliciously, or recklessly with conscious disregard for the substantial and unjustifiable risk of injury or damage to others

including Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXXVI - STRICT LIABILITY (FAILURE TO WARN)  
(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXXV, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count LXXXVI for strict liability, failure to warn.

1509. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1508 as though fully alleged herein.

1510. As alleged, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System, as designed and used in anticipated and foreseeable manner were and are unreasonably dangerous and defective at the time of sale.

1511. Defendants failed to warn or to provide adequate warning of such defective condition, of which they knew or minimally should have known.

1512. In addition or in the alternative, the dicamba-resistant trait, seed containing that trait, and the Xtend Crop System were and are defective for lack of adequate warning and/or instruction on safe use, rendering them unreasonably dangerous for anticipated or foreseeable use (and misuse) at the time of sale.

1513. A product is defective or unreasonably dangerous under T.C.A. § 29-28-101, *et seq.* if the manufacturer, producer, seller or assembler fails to adequately warn of its risks or hazards or fails to adequately instruct on safe use.

1514. Defendants failed to warn or provide adequate warning of the dangers, or adequate instruction on safe use, of the Xtend Crop System and its components.

1515. As alleged, ordinary users and consumers of the Xtend Crop System were unaware of such dangers, which by contrast, were foreseeable and foreseen by Defendants.

1516. Adequate warning and instruction were not provided by label or otherwise.

1517. Moreover, the labels were false, misleading, and failed to contain warnings or instructions adequate to protect, or prevent harm to, the environment including susceptible non-resistant plants and crops, including soybeans.

1518. Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class foreseeably were damaged as a direct and proximate result of Defendants' failure to warn, adequately warn and/or provide adequate instruction for safe use.

1519. Defendants acted intentionally, fraudulently, maliciously, or recklessly with conscious disregard for the substantial and unjustifiable risk of injury or damage to others including Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXXVII - NEGLIGENT DESIGN**  
**(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXXV-LXXXVI, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count LXXXVII for negligent design.

1520. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1519 as though fully alleged herein.

1521. Monsanto and BASF have a duty to use reasonable care in designing their products and in selecting any component parts made by another so that the product may be safely used in the manner and for the purposes for which it was made.

1522. The Xtend Crop System was intended and expected to be used with dicamba-resistant seed and dicamba herbicides sprayed over the top of crops grown from seed containing the dicamba-resistant trait in summer months and foreseeably, in the vicinity of susceptible non-

dicamba-resistant plants and crops, creating high risk of serious harm to those non-resistant plants and crop, including soybeans.

1523. As Monsanto and BASF knew or at minimum should have known, even supposed “low-volatility” dicamba herbicides are still volatile, prone to drift, and at high risk of moving off target and damaging susceptible non-dicamba resistant plants and crops.

1524. The majority of damage was attributable to volatility of dicamba, a function of chemistry rather than manner of application.

1525. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1526. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1527. As a direct and proximate result of Defendant’s failure to use ordinary care in the design of the dicamba-resistant trait, seed containing that trait, and/or the Xtend Crop System, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1528. Defendants acted intentionally, fraudulently, maliciously, or recklessly with conscious disregard for the substantial and unjustifiable risk of injury or damage to others including Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXXVIII - NEGLIGENT FAILURE TO WARN**  
**(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXXV-LXXXVII, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count LXXXVIII for negligent failure to warn.

1529. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1528 as though fully alleged herein.

1530. Monsanto and BASF, who knew or reasonably should have known that their product was and is likely to be dangerous for its intended use or foreseeable misuse, have a duty to use reasonable care to warn of the product's danger or to reveal its unsafe condition.

1531. Monsanto and BASF knew, or at minimum should have known, that the Xtend Crop System made up of the dicamba-resistant trait, seed containing that trait and dicamba herbicide was dangerous for its intended use.

1532. To the extent damage resulted from drift and otherwise, it was foreseeable, and indeed foreseen, that applicators could not or would not adhere to label instructions.

1533. To the extent applicators used older versions of dicamba, it was foreseeable, and foreseen, that they would do so.

1534. Monsanto and BASF knew or at minimum should have known of the dangers.

1535. Defendants failed to use reasonable care to warn and adequately warn of the product's danger or to reveal its unsafe condition. To the contrary, each misrepresented and concealed the risks and hazards of the Xtend Crop System and its components.

1536. Defendants breached their duty and as a direct and proximate result, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1537. Defendants acted intentionally, fraudulently, maliciously, or recklessly with conscious disregard for the substantial and unjustifiable risk of injury or damage to others including Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class. Punitive damages are thus warranted.

**COUNT LXXXIX - NEGLIGENT TRAINING  
(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXXV-LXXXVIII, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count LXXXIX for negligent training.

1538. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1537 as though fully alleged herein.

1539. Monsanto and BASF have a duty to provide adequate training and instruction for safe use of their products.

1540. Monsanto and BASF failed to provide reasonable and adequate training and instruction to their employees, agents, licensees or distributors or to users of the Xtend Crop System.

1541. Adequate instruction was not provided by education or training, and none of the labels contain instruction for use that would, if followed, prevent harm to the environment including susceptible, non-resistant plants and crops including soybeans.

1542. In addition to duty imposed by law, Monsanto and BASF each specifically undertook to render services to users of the Xtend Crop System, including the provision of stewardship tools, education and training, which both recognized to be minimally necessary for the protection of third persons or their property, including Tennessee Plaintiffs and members of the Tennessee State Soybean Producers Class.

1543. Monsanto and BASF both failed to exercise reasonable care in this undertaking, which increased the risk of harm to Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class.

1544. As a direct and proximate result of Defendants' failure to use reasonable care in providing instruction and training on use of the Xtend Crop System, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1545. Defendants acted intentionally, fraudulently, maliciously, or recklessly with conscious disregard for the substantial and unjustifiable risk of injury or damage to others

including Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XC - BREACH OF IMPLIED WARRANTY(FITNESS)  
(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In in addition or in the alternative to Counts I and LXXXV-LXXXIX, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count XC for breach of implied warranty of fitness for particular purpose.

1546. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1545 as though fully alleged herein.

1547. Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were injured due to the unsafe, defective, and dangerous Xtend Crop System.

1548. Monsanto and BASF both knew that the dicamba-resistant trait, and seed containing that trait, would be used with dicamba herbicide applied over the top of soybean and cotton grown from dicamba-resistant seed.

1549. Monsanto sold the dicamba-resistant trait, as well as seed containing that trait, into Tennessee.

1550. BASF is in a partnership, joint venture or joint enterprise with Monsanto and is jointly liable.

1551. In addition or in the alternative, Monsanto and BASF entered into one or more agreements for joint development of the dicamba-resistant trait and its commercialization. BASF itself sold or Monsanto commercialized, manufactured, sold and distributed that trait in soybean and cotton seed, acting for itself and as agent for BASF, which shared profits therefrom.

1552. BASF also supplied and/or licensed a dicamba formulation to Monsanto, who added VaporGrip Technology and supplied the same to others, including DuPont, and both

Defendants manufactured and sold dicamba herbicide, all as part of the Xtend Crop System, for use over the top of soybean and cotton grown from seed containing the dicamba-resistance trait.

1553. Monsanto and BASF both marketed and promoted the trait, seed, and Xtend Crop System, representing that the system was safe and could be used in a manner that would prevent off-target movement to susceptible non-dicamba resistant plants and crops.

1554. Monsanto and BASF knew that purchasers of the Xtend Crop System rely on their skill and judgment to select or furnish suitable seed and corresponding herbicide for weed control that will not damage susceptible non-dicamba resistant plants and crops.

1555. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait, and Xtend Crop System were fit for the particular purpose of controlling weeds without harm to non-resistant plants and crops.

1556. The trait, seed and Xtend Crop System were not fit for such purpose, and thus Monsanto and BASF breached the implied warranty of fitness for particular purpose.

1557. Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class are people Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

1558. As a direct and proximate result of such unfitness, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1559. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XCI - BREACH OF IMPLIED WARRANTY (MERCHANTABILITY)  
(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In in addition or in the alternative to Counts I and LXXXV-XC, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count XCI for breach of implied warranty of merchantability.

1560. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1559 as though fully alleged herein.

1561. Defendants are manufacturers, sellers and merchants of goods of the kind at issue in this case.

1562. To be merchantable, a product must be fit for the ordinary purposes for which it is used and must be adequately labeled.

1563. Monsanto and BASF warranted that the dicamba-resistant trait, seed containing that trait, and Xtend Crop System were fit for the ordinary purpose of controlling weeds without harm to other susceptible non-dicamba resistant plants and crops.

1564. The trait, seed and Xtend Crop System were not fit for such purpose, and were not adequately labeled and thus Monsanto and BASF breached the implied warranty of merchantability.

1565. Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class are people Monsanto and BASF would reasonably have expected to be affected by the dangerous Xtend Crop System and its components.

1566. As a direct and proximate result of such unfitness, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1567. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XCII - BREACH OF EXPRESS WARRANTY**  
**(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In in addition or in the alternative to Counts I and LXXXV-XCI, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count XCII for breach of express warranty.

1568. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1567 as though fully alleged herein.

1569. Monsanto and BASF each made numerous affirmations of fact as well as promises and descriptions, of the Xtend Crop System and components thereof to buyers relating to the goods sold that became part of the basis of those bargains.

1570. Representations, promises, and descriptions by Monsanto include that:

- a. Xtend seed is high-yield;
- b. the Xtend Crop System would result “in better performance and safety to nearby crops;”
- c. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- d. purchasers of the Xtend Crop System could apply the new dicamba formulations over the top of plants grown with dicamba-resistant seed with “proven” application methods without damaging off-target plants and crops;
- e. VaporGrip Technology provides a “[s]tep-change reduction in volatility;”
- f. XtendiMax has a “significant reduction in volatility potential,” has “[l]ow volatility” and “[w]ill provide applicators confidence in on-target application of dicamba in combination with application requirements for successful on-target applications;”
- g. VaporGrip Technology is a “[r]evolutionary [b]reakthrough” which “significantly minimizes dicamba’s volatility potential after spraying – provides growers and applicators confidence in on target application of dicamba” and growers can “[a]pply [w]ith [c]onfidence;”
- h. the Xtend Crop System can be used in a manner that will not damage off-target plants and crops.

1571. Representations, promises, and descriptions by BASF include that:

- a. dicamba-resistant seed used with “low” volatility dicamba will grow soybean and cotton crops, controlling weeds without damaging off-target plants and crops through volatility;
- b. there would be “on-target herbicide application success with low volatility and drift so the herbicide stays in place;”

- c. Engenia minimizes volatility and is not “a chemistry that is dangerous;”
- d. Engenia offers “excellent . . . crop safety” and “low-volatility characteristics for improved on-target application;”
- e. the Xtend Crop System with Engenia offers at least a 70% reduction in volatility as compared to older (Clarity) formulations;
- f. Engenia is a “step-change improvement;”
- g. the Xtend Crop System would result “in better performance and safety to nearby crops;”
- h. The Xtend Crop System offers significant reduction in any secondary loss profile as compared to older dicamba formulations;
- i. advanced formulation “reduces loss from volatility.”

1572. All these affirmations, promises, and descriptions created an express warranty that the goods would conform therewith.

1573. All of these representations, promises, and descriptions were made for the purpose of, and did, induce reliance on the part of persons who purchased the Xtend Crop System.

1574. The Xtend Crop System and its components did not conform with the express warranties created.

1575. Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class are persons who Monsanto and BASF might reasonably have expected to be affected by the Xtend Crop System and its components.

1576. As a direct and proximate result of Defendants’ breach of express warranty, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1577. To the extent required, Defendants received sufficient notice of their breach.

**COUNT XCIII - TRESPASS**  
**(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXXV-XCII, but in the alternative to Count LXXXIV, Tennessee Plaintiffs assert this Count XCIII for trespass.

1578. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1483-1577 as though fully alleged herein.

1579. Monsanto and BASF intentionally designed, developed, promoted, marketed and sold a genetically engineered trait for soybean and cotton for and with the express purpose of allowing and encouraging others to spray dicamba herbicide over the top of crops grown from seed containing that trait.

1580. Monsanto and BASF intentionally and aggressively promoted and encouraged in-crop use of dicamba herbicide as part of the Xtend Crop System with dicamba-resistant seed.

1581. Monsanto and BASF or Monsanto, for itself and as agent for BASF, intentionally sold the dicamba-resistant trait and seed containing that trait, directly and through others, into areas they knew were planted with non-resistant crops highly sensitive to dicamba and with knowledge not only that dicamba would be sprayed over the top of emerging resistant crops but that dicamba had and would move off target onto the land and growing crops without permission of rightful owners and possessors, including Tennessee Plaintiffs and members of the Tennessee Soybean Producers Class.

1582. Whether by volatilization and/or drift, dicamba particles entered and were deposited upon property (including land and crops) of which Tennessee Plaintiffs/Class members have possession and without their permission.

1583. Monsanto and BASF knew that such invasion would, to a substantial degree of certainty, result from their acts, and such invasion was caused by them.

1584. In addition, Monsanto and BASF promoted, aided, abetted, assisted, and contributed to the commission of a trespass.

1585. Monsanto and BASF intended such invasion, which benefitted them both by increasing demand for seed containing the dicamba-resistant trait through fear of injury to non-dicamba resistant plants and crops, which also encouraged use of dicamba herbicides.

1586. Such invasion interfered with Tennessee Plaintiffs' and Class members' right of possession and caused substantial damage to their property.

1587. As a direct and proximate result, Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class were damaged.

1588. Defendants acted intentionally, fraudulently, maliciously, or recklessly with conscious disregard for the substantial and unjustifiable risk of injury or damage to others including Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class. Punitive damages are thus warranted.

**COUNT XCIV - CIVIL CONSPIRACY**  
**(on behalf of Tennessee Plaintiffs and the Tennessee Soybean Producers Class)**

In addition or in the alternative to Counts I and LXXXIV-XCIII, Tennessee Plaintiffs assert this Count XCIV for civil conspiracy.

1589. Tennessee Plaintiffs incorporate by reference Paragraphs 1-382 and 1462-1588 as though fully alleged herein.

1590. Defendants, in an unlawful, fraudulent, deceptive scheme and device to improperly market, sell, and expand sales and profits from the defective Xtend Crop System, conspired with each other to create fear-based demand for the dicamba-resistant trait, and correspondingly more sales and use of dicamba herbicide, proliferating the dicamba-based system and thereby profiting from the ecological disaster it causes.

1591. The object of the conspiracy was and is to create and perpetuate an ecological disaster through use of the defective, dangerous Xtend Crop System, forcing farmers to purchase dicamba-resistant technology out of self-defense in order to protect their crops from dicamba damage at the expense of producers like Tennessee Plaintiffs and other members of the Tennessee State Soybean Producers Class, whose non-resistant crops were damaged.

1592. Early on, Defendants formed a partnership, joint venture, or joint enterprise or otherwise agreed to share technologies in order to speed the dicamba-based system to market.

1593. Defendants are intertwined in course of action to great degree. They both funded and developed the biotechnology for dicamba resistance and share in profits from its commercialization. BASF provided its proprietary dicamba formulation to Monsanto, whose XtendiMax is the same as BASF's Clarity only with Monsanto's additive called VaporGrip. They participated in joint field tests and jointly developed stewardship and education programs to "support long term sustainability" of a dicamba-tolerant system.

1594. Defendants both invested in dicamba production facilities in preparation for the demand they knew would be created by damage the Xtend Crop System would and did cause.

1595. Defendants knew the risks to susceptible non-dicamba resistant plants and crops, particularly soybeans which are highly sensitive to dicamba, even at very low levels.

1596. Defendants conspired to and did falsely advertise and market the Xtend Crop System's dicamba herbicides as low volatility and capable of remaining on target to mislead farmers, create and increase demand for the dicamba-resistant trait technology and herbicides.

1597. Defendants knew that even the supposed lower volatility dicamba still is volatile and still at high risk of movement onto susceptible non-resistant plants and crops, causing them damage.

1598. Defendants also knew that the dicamba is drift-prone, that the level of precaution necessary to prevent drift is extraordinary, and that off-target drift and damage to susceptible non-dicamba resistant plants and crops was substantially certain to occur.

1599. In 2015 and 2016, through their concerted activities, Defendants colluded in the release of dicamba-resistant seeds prior to any dicamba registered for in-crop use, with knowledge, intent and certainty that farmers would use older dicamba herbicides, such as BASF's Banvel or Clarity, on soybean and/or cotton grown with dicamba-resistant seed and both Defendants would profit in the short-term and long-term.

1600. Defendants conspired to and did encourage spraying of dicamba herbicides, regardless of how much damage it would and did cause.

1601. Spraying of older dicamba formulations on crops grown from dicamba-resistant seed aided Defendants' conspiracy in demonstrating damage and creating fear in farmers – either use this technology or face the loss of their non-dicamba resistant crops – until farmers no longer had a choice.

1602. Defendants conspired to and did inadequately warn, and to omit and conceal the risks, especially volatility, from the public, weed scientists, and persons who would be using the Xtend Crop System, in order to and with the intent of increasing damage to non-resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly, more dicamba herbicides.

1603. Defendants conspired to and did inadequately educate, train or instruct on safe use of the Xtend Crop System, notwithstanding that each clearly knew the importance thereof to have even minimal chance of safe use also in order to and with the intent of increasing damage to non-

resistant crops and driving up fear-based demand for dicamba-resistant seed and correspondingly more dicamba herbicide.

1604. Defendants jointly proceeded with full-scale launch of the Xtend Crop System, causing a wave of destruction to susceptible non-dicamba resistant plants and crops, including Plaintiffs' crops, in Tennessee and other states.

1605. In response to the damage, Defendants issued coordinated public statements and offered identical stated causes for the damage, none of which had to do with the Xtend Crop System, in order to further ensure ever-increasing demand and profits.

1606. Defendants' scheme was intended to and has caused farmers to purchase seed containing the dicamba-resistant trait out of self-defense, leading to more sales and use of dicamba herbicides, which has and will cause more damage, resulting in more sales of seed with the dicamba-resistant trait and so on.

1607. Defendants' unlawful actions resulted in damage to Tennessee Plaintiffs and other members of the Tennessee Soybean Producers Class, who were harmed in the ways and manners described above.

#### **DEMAND FOR JUDGMENT**

WHEREFORE, Plaintiffs respectfully demand judgment from Defendants, jointly and severally, for: (a) all monetary and compensatory relief to which they are entitled and will be entitled at the time of trial; (b) punitive damages; (c) attorneys' fees; (d) prejudgment and post-judgment interest at the maximum rates allowed by law; (e) all allowable costs of this action; and (f) such other and further relief as appropriate, just and proper.

Date: August 1, 2018

Respectfully submitted,

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**CERTIFICATE OF SERVICE**

I hereby certify that on August 1, 2018, the foregoing was filed electronically with the Clerk of Court to be served by operation of the Court's electronic filing system on all counsel of record.

/s/ Don M. Downing